
French Limited Wetlands Mitigation

Site Selection Report

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Site Selection Report
French Limited Wetlands Mitigation

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Site Selection Report

French Limited Wetlands Mitigation

I. Background

The French Limited Project is located within Harris County, near the town of Crosby. This site was at one time utilized for the disposal of industrial wastes. It was later declared a Superfund site and has been undergoing remediation for several years. On March 10, 1993, a United States District Court entered a Natural Resources Consent Decree requiring the site PRPs (the French Limited Task Group or FLTG) to undertake a "marsh restoration project" to provide for replacement of natural resources injured, destroyed, or lost as a result of releases (or threatened releases) of hazardous substances at or from the French Limited Site.

A Project Review Group was established in accordance with the Consent Decree. This group consists of one representative each from the Department of the Interior (U.S. Fish and Wildlife Service), NOAA, the Texas Natural Resource Conservation Commission, Texas Parks and Wildlife Department and the Texas General Land Office. This group is responsible for the evaluation and approval of the site identified for the marsh restoration, review and approval of the marsh restoration plan, and oversight of implementation of the marsh restoration plan.

The Consent Decree required that a 21 to 25 acre site be selected and "acquired or caused to be acquired" for this wetlands mitigation project no later than March 10, 1994. This site must be deemed "suitable" for marsh restoration by the Project Review Group. The decree also called for the site to be (or be made to be) tidally linked to the San Jacinto River and, if possible, be in the general vicinity of the French Limited Site.

II. Scope of Work

FLTG hired Crouch Environmental Services (CES) to execute the Scope of Work. The work scope for the Site Selection phase of the French Limited Wetlands Mitigation project was as follows:

- Define wetlands restoration response options;
- Develop specific agency requirements;

- Develop restoration site evaluation and selection criteria (including location, acquisition cost, restoration cost, wetlands enhancement potential and community involvement);
- Identify, characterize and evaluate potential wetlands response sites; and
- Recommend the "best" site, including a justification for the selection and a detailed description of the selection.

III. Identification of Wetlands Restoration Response/Site Selection Options

The following options for selecting a site or sites and responding to the Consent Decree should be evaluated:

- Enhancement of an existing wetlands site or sites
- Restoration of a degraded or destroyed wetland
- Creation of an entirely new wetlands site
- Selection of a single, large site
- Selection of multiple, small sites.

These options were presented to the Project Review Group for their consideration. The consensus opinion indicated that creation of a single, large site was preferable.

IV. Site Selection Criteria

Criteria were developed for screening the identified sites. Specific criteria were developed for the following five general criteria:

- Environmental/Technical Criteria
- Sociological Criteria
- Political Criteria
- Economic Criteria
- Risk Criteria.

Table 1 lists specific criteria considered within each of the five general criteria.

Table 1
Site Selection Criteria

<u>Environmental /Technical</u>	<u>Sociological</u>	<u>Political</u>	<u>Economic</u>	<u>Risk</u>
Hydrology/ topography	Community benefits - education, observation	Proximity to French Site	Land acquisition cost	Subsidence
Wave Stress	Accessibility	Acceptance by Regulators (Project Review Group)	Excavation cost	Types of wetlands listed in order of most successful to most risky: Estuarine marsh - brackish to intermediate Coastal Marsh Freshwater marsh hydro- geologically connected to surface water Isolated surface water marsh (freshwater) Forested wetland (freshwater) hydro- geologically connected to surface water body Isolated freshwater marsh or forested wetland dependent on groundwater
Wetland type: Estuarine Freshwater	Perception - how the community will view the selection of each site as compared to others	Perception: Community Local Public Officials Statewide officials Federal Officials	Disposal cost (trees; excavated soils; etc.)	
Impact on local, high quality habitat	Aesthetics		Time constraints = additional cost	
Soil type	Community acceptance			
Size and configuration	Future site ownership - entity willing to own and maintain?			
Susceptibility to natural disasters	Number of possible visitors			

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Table 1 (Continued)

Site Selection Criteria

<u>Environmental /Technical</u>	<u>Sociological</u>	<u>Political</u>	<u>Economic</u>	<u>Risk</u>
Threatened and endangered species				
Past Site Uses				
Surrounding land use: Buffer zone Compatibility Detrimental activities nearby				
Type of wetlands project - i.e. restoration, creation, or enhancement				

V. Methodology for Identification of Potential Sites

An aerial overflight of the lower San Jacinto River area was conducted via helicopter in January, 1994. In addition to visual observation of the area, various maps and historical aerial photographs were reviewed, including USGS 7.5 minute topographic quadrangle maps, Landiscor high-altitude aerial photographs, U.S. Soil Conservation Service historic aerial photographs, and 1994 low-altitude aerial photographs of specific locations taken during the helicopter aerial overflight.

Twenty-eight sites were identified in the lower San Jacinto River area that warranted further screening. A general location map of the study area is depicted in Figure 1. Appendix A contains portions of 7.5 minute topographic quadrangle maps showing the specific locations of all 28 sites initially considered.

VI. Initial Screening of 28 Identified Sites

The 28 sites identified initially are indicated on portions of 7.5 minute USGS topographic quadrangle maps in Appendix A. They were given names referencing their location or identifying features, as follows:

Boaz Island	Rio Villa Park
Plantation House	Highland Shores
Tabbs Bay/Exxon	Highlands
Spoil Islands	Van Road
Spilmans Island	Barrett I
Bayland Park	Barrett II
Brownwood	Old U.S. 90 Park
San Jacinto Monument	Site Adjacent to French Ltd.
San Jacinto Battlefield	Garrett Road/Specialty Sand
San Jacinto Inn	North Pasture/Specialty Sand
Baytown Boat Club	Little Eddy
Tugboat Annie's	South of Baker Lake
Bird Lake	Baker Lake
Wallisville Road	Big Eddy

Fifteen sites were eliminated in the initial site screening, leaving 13 sites for further consideration. Sites eliminated include:

Boaz Island	Highlands
Plantation House	Van Road
Tabbs Bay/Exxon	Old U.S. 90 Park
Spilmans Island	South of Baker Lake
Bayland Park	Baker Lake



Figure 1 - General Location Map of Study Area

SCALE: 1:100,000

DATE: 4/11/94

APPROVED BY:

Kay Crouch

DRAWN BY:

REVISED

French Limited Wetlands Mitigation

Crouch Environmental Services

DRAWING NUMBER

San Jacinto Inn
Baytown Boat Club
Tugboat Annie's
Bird Lake

Big Eddy

Table 2 indicates reasons for eliminating these 15 sites.

Seven sites were eliminated primarily because they already include a high quality wetlands with little need of expansion or improvement. These sites include the Plantation House site, Baytown Boat Club, the Bird Lake site, the Van Road site, the site South of Baker Lake, the Baker Lake site, and the Big Eddy site.

Creation of wetlands at three of the sites would have involved the sacrifice of quality upland habitat, mainly pine/hardwood forest which supports valuable wildlife resources. These include Tugboat Annie's site, the Highlands site, and the Old U.S. 90 Park site.

The Boaz Island and Spilmans Island sites were virtually inaccessible, both for construction and public usage purposes. In addition, Spilmans Island currently has ongoing dredged spoil activity.

The Tabbs Bay/Exxon site (Evergreen Point on the U.S. topographic quadrangle map) is subject to very high wave stress. It is limited in size by nearby development and would have required substantive excavation to create new wetlands acreage.

Both the Bayland Park and San Jacinto Inn sites appeared to have been significantly built up through dredged spoil deposition. The deposition alone is a negative factor, and that factor combined with high elevations requiring significant excavation caused these two sites to be eliminated.

A meeting was held with the Project Review Group on January 27, 1994 to discuss the 28 sites, the evaluation criteria and the elimination of 15 of the sites. Table 3 describes comments received by the Group at that meeting.

In general, the Project Review Group agreed with the Site Selection criteria put forward and with the elimination of 15 of the 28 originally identified sites.

VII. Screening of 13 Sites

Thirteen sites remained under consideration after the first review, including:

Table 2

Initial Screening -
Reasons for Eliminating 17 Sites

<u>Site Name</u>	<u>Reasons for Elimination</u>
Boaz Island	Highly inaccessible either by public or for construction purposes; minimal expansion or enhancement possibilities
Plantation House	Existing wetlands of very high quality; minimal expansion or enhancement opportunity
Tabbs Bay/Exxon	Very high wave stress; Very steep banks would require substantial excavation to create new wetlands; near subdivision
Spilmans Island	Inaccessible; ongoing spoil deposition
Bayland Park	Looks intentionally built up; significant excavation required; very limited possibilities
San Jacinto Inn	Steep banks; high elevation above MSL would require significant excavation; possible dredged spoil site for future ship channel expansion
Baytown Boat Club	Existing very high quality wetland with very little expansion possibility
Tugboat Annie's	Poor buffer; significant excavation required; existing mixed pine-hardwood habitat would be destroyed
Bird Lake Site	Existing high quality wetland; expansion and enhancement possibilities limited; very inaccessible

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Table 2 (Continued)

Initial Screening -
Reasons for Eliminating 17 Sites

<u>Site Name</u>	<u>Reasons for Elimination</u>
Highlands	Would require destruction of existing mixed pine /hardwood habitat; significant excavation required
Van Road	Existing very high quality wetlands not in need of enhancement; not much room to expand
Old U.S. 90 Park	Existing pine/hardwood forest would be destroyed; significant excavation required
South of Baker Lake	Existing very high quality freshwater wetlands; already some enhancement performed; not in need of additional treatment
Baker Lake	Existing high quality freshwater forested wetland; expansion would require significant excavation; not tidally connected to San Jacinto River; not in need of additional treatment; would destroy existing pine forest habitat
Big Eddy	Existing high quality cypress lake; only feasible to expand in northern end; noted significant vandalism in existing lakeside park causing concern regarding future maintenance of the site; not in significant need of additional treatment from technical standpoint

Table 3

**Comments of Project Review Group on
Initial Site Screening**

<u>Agency</u>	<u>Comment</u>
NOAA/National Marine Fisheries Service	Believes that the Houston Port Authority has specific plans for the Spoil Islands site; feels that a great deal of "buffer" acreage would need to be acquired if the Highlands Shores Site were utilized to ensure that existing wetlands are not degraded; expressed concerns regarding water quality at the Barrett I site if wetlands were constructed downstream of sewage treatment plant discharge; suggested that the San Jacinto Monument Site and the San Jacinto Battlefield Site could be used in concert with one another; expressed that this agency would favor selection of a brackish site and preferred that the site selected be south of the French Limited site (understanding that the site cannot be too distant from French Limited); expressed concern that the Wallisville Site may not have enough non-wetlands area available to provide needed additional acreage; is concerned with controlling public access to whichever site is selected; multiple sites would be acceptable but would prefer larger site; if restoration is selected as the option would need to demonstrate that an old wetland had been destroyed.
TNRCC	Current concern is to move toward site acquisition to meet the deadline established in the Consent Decree; believes that the goal of the Decree is the creation of new wetlands rather than the enhancement or restoration of old wetlands; a larger number of acres would be required to fulfill the Decree if enhancement were selected; TNRCC would have a large interest in the development of a wetland that would function as additional treatment and improve water quality and initially favored the Barrett I site for this reason; the site selected should have nutrient input to and from the San Jacinto River System; prefer sites where current high quality habitat is not destroyed.

Table 3 (Continued)

**Comments of Project Review Group on
Initial Site Screening**

<u>Agency</u>	<u>Comment</u>
GLO	Multiple sites would be acceptable, but larger sites are better than smaller sites; expressed concern that existing valuable upland habitat not be destroyed to create the new wetland; long term success of the new wetland will depend on surrounding land use and a buffer around the site.
TPWD	Feels the Consent Decree requires that the wetlands project be "hydrologically connected to the San Jacinto River"; isolated freshwater sites that could not be connected to the river should be abandoned; public should have access to the site; Little Eddy or Rio Villa Park are less desirable if the public could not access these locations; prefer sites where existing high quality habitat is not destroyed.
USFWS	If enhancement selected as option, more acres will need to be treated; one large site was preferable to several smaller sites; wetland and public can coexist; public must not be able to "impact" the site; loss of good habitat such as bottomland hardwood or quality upland for the wetlands would not be favorable.
General Comments:	Large site is better than several small sites; creation is better than enhancement and restoration; site should be "tidally linked" to the San Jacinto River; high levels of crime and vandalism should be viewed negatively in the selection process; criteria presented are appropriate; public access to the site should be considered favorably but the public should not be able to have a negative impact on the site; San Jacinto Monument Site is a good choice for access by the public and is also available to citizens of Crosby and Barrett Station; negative impact on existing high quality habitat is undesirable.

Spoil Islands
 San Jacinto Monument
 San Jacinto Battlefield
 Brownwood
 Wallisville Road
 Rio Villa Park
 Highland Shores

Barrett I
 Barrett II
 Garrett Road/Specialty Sand
 North Pasture/Specialty Sand
 Little Eddy
 Site Adjacent to French Ltd.

Appendix B contains additional detail regarding characteristics of each of the 13 sites. January, 1994 low-altitude aerial photos of each site are included.

The project team committed to reducing the list to four sites before meeting with the Project Review Group again on February 17, 1994. The February 17 meeting was scheduled for the Project Review Group to visually inspect the best sites.

Nine sites were eliminated, leaving four sites for final consideration. Sites eliminated include:

Spoil Islands
 San Jacinto Battlefield
 Rio Villa Park
 Highland Shores
 Barrett II

Garrett Road/Specialty Sand
 North Pasture/Specialty Sand
 Little Eddy
 Site Adjacent to French Ltd.

Table 4 lists reasons these sites were eliminated. Five of the nine sites were considered not tidally "linked" to the San Jacinto River. As a result of the Project Review Group's concerns that these isolated freshwater wetlands may not technically meet the Consent Decree, they were no longer viable sites. These include Barrett II, Garrett Road/Specialty Sand, North Pasture/Specialty Sand, Little Eddy, and the Site Adjacent to French Limited.

After further consideration, two of the sites (Rio Villa Park and Highland Shores) were deemed to already have wetlands of such quality that they were not judged to be as in need of treatment as several of the other sites.

The San Jacinto Battlefield Site was eliminated primarily because of concerns that the significant amount of excavation required to generate additional wetlands at this location would be likely to disturb or destroy valuable historic resources from the Battle of San Jacinto.

The public would have virtually no access to the Spoil Islands. That factor, coupled with difficult construction and high wave stress, caused this site to be eliminated in favor of others.

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Table 4

**Reasons for Eliminating Nine
of 13 Remaining Sites**

<u>Site Name</u>	<u>Reasons for Elimination</u>
Spoil Islands	High wave stress; no public access; difficult construction access; farthest site from French Limited.
San Jacinto Battlefield	Poor buffer; surrounding land use heavy industry; possible to disturb significant historic resources through excavation; high excavation and disposal cost.
Rio Villa Park	Existing wetland already high quality; limited public access probably only benefiting Rio Villa residents; significant excavation required; significant disposal cost.
Highland Shores	Existing wetland already high quality; only moderate access to public; moderate number of visitors expected; not one of the sites severely in need of treatment.
Barrett II	Is an isolated freshwater wetland; not "linked" to the San Jacinto River; poor public access; low number of visitors expected; aesthetics impacted by nearby sand pits; would destroy existing pine forest.
Garrett Road/Specialty Sand	Is an isolated freshwater wetland; not "linked" to the San Jacinto River; surrounded by commercial sand pits; very poor public access; very limited public benefits; potentially high disposal cost.

Table 4 (Continued)

Reasons for Eliminating Nine
of 13 Remaining Sites

<u>Site Name</u>	<u>Reasons for Elimination</u>
North Pasture/Specialty Sand	Would be an isolated freshwater wetland; not "linked" to the San Jacinto River, surrounded by commercial sand pits; very poor public access; low potential for community benefits; significant excavation and disposal cost.
Little Eddy	Is an isolated freshwater wetland; not "linked" to the San Jacinto River (although could be made to be connected to river); steep elevational grades requiring significant excavation; potentially high disposal cost; would destroy existing pine forest.
Site Adjacent to French Ltd.	Is an isolated freshwater wetland; not "linked" to the San Jacinto River; poor aesthetics; moderate number of visitors expected; significant excavation and disposal; poorly buffered; would destroy pine forest; significant subsidence potential.

VIII. Consideration of the Final Four Sites

The four sites remaining included:

San Jacinto Monument
Brownwood

Barrett I
Wallisville Road

Table 5 lists the site selection criteria developed for each of these four sites.

A. Additional Research on the Four Candidate Sites

Additional background research was conducted on each of the four candidate sites. This included review of 1993 tax records in order to establish property ownership and review of historic aerial photographs of each site in order to determine past site conditions. Appendix C contains aerial photos of each site dating from 1953.

A preliminary conceptual design for each site was commissioned from local landscape architects. This was done in order to allow CES, FLTG, and the Project Review Group to visualize how the wetlands creation/restoration could be accomplished at each site. These conceptual designs depicted on January, 1994 aerial photos of the sites are also included in Appendix C.

1. Wallisville Road Site

Research of the tax records showed complicated ownership issues for the Wallisville Road Site. This location was developed into a subdivision prior to undergoing significant subsidence and land loss over the last 25 years. As a result, multiple owners have lots within that subdivision that are submerged.

Aerial photos from 1953 show the Wallisville Road Site to be much larger than at present. It appears to have been a very large, probably high quality wetland site. If this site were selected, the response option would clearly be restoration of a destroyed or degraded wetland.

Conceptual design for the Wallisville site involved re-creating freshwater wetlands lost to subsidence. Shoreline stabilization would need to be provided to protect the area from boat wakes. A dam or weir would be constructed across the opening of the site to prevent saltwater intrusion. Significant fill material would be imported and graded to create elevations capable of supporting emergent freshwater vegetation. There is easy access to the area via Wallisville Road, and observation platforms could be constructed so that the public could view the area.

Table 5

**Site Selection Criteria for the
Final Four Sites**

Environmental/Technical Criteria:

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Restoration and enhancement of existing wetlands	Enhance/expand freshwater wetlands	Create/enhance both freshwater and estuarine wetlands	Restoration and enhancement of existing wetlands
Moderate wave stress - wave barrier construction required	Low to no wave stress - some shoreline stabilization required	Internal area under consideration not subject to wave stress at this time.	High wave stress - significant shoreline stabilization required
Good buffer	Moderate buffer	Good buffer now.	Excellent buffer
Design contemplates restoration of a freshwater wetland (Manipulation of hydrology required)	Requires significant manipulation of hydrologic system	Existing hydrologic system adaptable to wetlands creation	Existing hydrologic system easily adaptable to wetlands restoration and enhancement
Compatible surrounding land use	Compatible with surrounding land use	Highly compatible with planned land use	Very compatible land use

Table 5 (Continued)

**Site Selection Criteria for the
Final Four Sites**

Environmental/Technical Criteria (Cont.):

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Large Site	Large site	Large site	Large site (approximately 300 acres could be beneficially impacted)
Expected subsidence = 1.5 feet by year 2030 (best case)	Projected subsidence = 1.5 feet by year 2030 (best case)	Projected subsidence 0.3 feet by year 2030 (best case)	Projected subsidence 0.3 feet by year 2030 (best case)
Susceptibility to natural disasters relatively low (hurricanes)	Susceptibility to natural disasters (hurricanes) low	Potentially susceptibility to hurricane damage	Moderate susceptibility to hurricane damage
Past site use is wetlands	Past site uses include lumber and commercial sand excavation	Past site use was as a residential neighborhood with typical residential infrastructure	Past site uses include wetlands/dredged spoil disposal/state park
	Surrounded by mixed, high quality pine/hardwood forest with existing wildlife benefits	Would not have a negative impact on existing habitat	Existing excellent diversity of wetland habitat types

Table 5 (Continued)

**Site Selection Criteria for the
Final Four Sites**

Environmental/Technical Criteria (Cont.):

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
	Some beneficial polishing of wastewater treatment effluent possible		
	Significant elevational differences	Level, low-lying area.	

Sociological Criteria:

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Moderate public access	Easy public access for Barrett Station	Good access	Excellent public access

Table 5 (Continued)**Site Selection Criteria for the
Final Four Sites**

Sociological Criteria (Cont.):

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Limited community benefits	Possible to enable community access to San Jacinto River Community benefits probably limited to Barrett Station	Good educational/recreational potential	Community benefits - statewide vs. local benefit Excellent educational/recreational opportunities
Good aesthetics	Good aesthetics	Poor aesthetics currently (project would significantly enhance aesthetics)	Excellent aesthetics
Future stewardship unknown	Barrett Station probably willing to own and provide future stewardship	City of Baytown willing to own and provide stewardship	TPWD will accept and maintain in perpetuity

Table 5 (Continued)**Site Selection Criteria for the
Final Four Sites**

Sociological Criteria (Cont.):

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Community perception - probably acceptable but impacted community is not direct beneficiary	Community acceptance/perception - beneficial to community directly impacted by French	Good local community acceptance - does not directly benefit communities impacted by French but is close-by and easily accessible for their use	Good local community acceptance as well as statewide benefits to public - does not directly benefit communities impacted by French but is easily accessible to them
Number of visitors relatively low	Number of visitors relatively low	Possible large number of visitors	Almost 1 million visitors per year
			Restoration may further protect historic resources

Table 5 (Continued)

**Site Selection Criteria for the
Final Four Sites**

Political Criteria:

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Acceptable to regulators	Acceptable to regulators	Acceptable to regulators	Acceptable to regulators
Relatively close to French Site but across river	Close proximity to French site	Moderate distance from French Site	Moderate distance and across river from French Site
Perception of community officials unknown	Good acceptance by community officials	City of Baytown community officials very favorable toward this site -- Perception of other community officials unknown	Potentially high acceptance from public officials statewide
			TPWD highly favors restoration of this site and will provide assistance

Table 5 (Continued)**Site Selection Criteria for the
Final Four Sites****Economic Criteria:**

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Land cost unknown	Land cost unknown	No land cost .	No land cost.
Large number of land owners	At least two land owners	Land owned primarily by City of Baytown.	Land owned primarily by Texas Parks and Wildlife Department, State of Texas
	Potential excavation and disposal costs		Requires importing of fill material
			Significant shoreline stabilization cost

Table 5 (Continued)

Site Selection Criteria for the
Final Four Sites

Risk Criteria:

<u>Wallisville Road Site</u>	<u>Barrett I Site</u>	<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Moderately high risk due to required manipulation of hydrology and restoration of freshwater wetland	Moderately high risk based on required manipulation of hydrology and creation of freshwater wetland	Development of site represents relatively low risk	Restoration/creation of new estuarine wetland represents low risk
Projected Subsidence is 1.5 feet by the year 2030	Projected Subsidence is 1.5 feet by the year 2030	Projected Subsidence is 0.3 feet by the year 2030	Projected Subsidence is 0.3 feet by the year 2030
		Qualified city personnel available for future site management	Qualified state personnel available for future site management

2. Barrett I Site

Review of tax records indicated that the Barrett I site area probably has only two owners (the area is very large and the actual site ownership would depend on which acres were acquired). Photos from 1953 show it to be forested upland with two small lakes. Water bodies shown on 1994 aerial photos are probably a result of both subsidence and commercial sand excavation.

The conceptual design for this site shows that wetlands could be created by significant grading of fairly steep shoreline areas within old sand pits. Some high quality pine forest would be destroyed to create the wetlands. Islands of forest would be left within the wetlands area. Parking and a boat ramp could be provided for visitors. Aesthetics would be impacted by the Highway 90 overpass. Access would be by unimproved road through private property west of Barrett Station. This road would require significant improvement or would only provide access for visitors with four-wheel drive vehicles.

A second option was also conceptualized for the Barrett Station area. This option involves grading of land downstream of the Barrett Station wastewater treatment facility. Marsh would be created on this site to provide additional treatment of wastewater effluents. This option would not provide recreational opportunities for visitors but would have educational value.

3. Brownwood

The Brownwood Site is owned primarily by the City of Baytown, with some private ownership of a few pieces of property still remaining. Photos from 1953 demonstrate the significant land loss experienced in this area over the past 40 years. The area was at one time a substantial waterfront subdivision. It was abandoned in 1983 as a result of consistent flooding caused by subsidence due to groundwater withdrawal. A significant amount of the area now consists of standing water.

The preliminary conceptual design developed for Brownwood shows that a substantive improvement can be made on this site by constructing the wetlands. Removal of some of the existing infrastructural debris would add greatly to its aesthetic appeal. Inlets can be created to allow infusion of brackish water. Grading and contouring of the site would create large zones of emergent vegetation. Existing large trees could be left as islands throughout the site and would provide nesting and resting habitat for birds. The design includes observation platforms and observation trails.

The City of Baytown plans to develop Brownwood into a park and recreational site. They welcome the wetlands project and feel that it fits very well into their long-range plans for the area.

4. San Jacinto Monument Site

With the exception of approximately 25 acres owned by private entities, the San Jacinto Monument Site is owned by the State of Texas and managed by Texas Parks and Wildlife Department as part of the San Jacinto State Park. TPWD feels that this important site is in dire need of restoration or it may be entirely lost due to significant shoreline erosion caused by large vessels traveling up and down the Houston Ship Channel. This location was historically important in the Battle of San Jacinto and supports a great deal of wildlife (especially migratory ducks and other shore birds).

Historic aerial photos of the San Jacinto Monument Site dating back to 1953 show that the area was being utilized for dredged spoil deposition at that time. This land has since been lost to subsidence. The shoreline elevation bordering the Houston Ship Channel is very low, allowing wakes from ships to wash over the shoreline and erode it away.

Conceptual design included stabilization of the entire shoreline. Without taking this step, any wetland created could subsequently be lost. This stabilization would also protect and allow the rebuilding of hundreds of acres of existing wetlands. In addition, an old levee along Santa Anna Bayou needs to be raised and reinforced to protect the existing wetlands and the new wetlands.

Preliminary design called for the creation of new marsh in the open water area at the northwest end of the site. Salinity would be controlled by constructing two connections to the Ship Channel and bay. Nature trails and observation platforms would be provided for the nearly 1 million visitors to the park every year.

B. Project Review Group Site Visits

On February 17, 1994 CES presented the final four candidate sites to the Project Review Group. The Group was briefed on the screening process and shown the preliminary conceptual designs for each of the four remaining sites. A visit was then made to each site.

In general, the Project Review Group felt that any of the four sites would meet the objectives of the Consent Decree.

Concern was expressed about the Barrett Station location. This concern primarily involved the large elevational change that would be required to create wetlands at the site. In addition, existing quality upland habitat would be destroyed. Concerns expressed about the Wallisville Site included the complications of ownership of submerged land by private individuals, and the risk involved with creating/restoring a freshwater wetland. The Group felt that of the four sites, the two best sites were Brownwood and the San Jacinto Monument Site. No one expressed a preference between these two sites.

C. Elimination of Two of the Four Remaining Sites

In order to comply with the Consent Order, FLTG was required to select a site by March 10, 1994. Two of the four sites (Wallisville Road and Barrett I) were eliminated in the next screening phase. Table 6 lists reasons for eliminating these two sites.

The most compelling reason for eliminating these sites is projected subsidence. Figure 2, obtained from the local subsidence district, depicts best case subsidence for Harris County up to the year 2030. Subsidence in the northern part of the study area is projected to be in excess of a foot. Subsidence in the southern part of the study area, where Brownwood and the San Jacinto Monument sites are located, is projected to be 0.3 feet. Subsidence in excess of 6 inches could dramatically change and probably destroy the newly created wetlands area. This fact was heavily weighted in the final screening and favored the Brownwood and San Jacinto Monument sites, where groundwater withdrawal and thus subsidence have already been brought under strict control.

Both Barrett I and the Wallisville Road sites would be freshwater wetlands. Brownwood and the San Jacinto Monument sites support brackish wetlands, the most successful and easily sustainable type of wetlands that can be created.

Public use of the Wallisville and Barrett sites would probably be much lower than use of the other two sites. The San Jacinto Monument site already attracts nearly 1 million visitors per year. Baytown's plans for Brownwood are likely to generate significant visitation from citizens throughout eastern Harris County (and for bird-watchers throughout the entire state). Both sites are very easily accessible for residents most directly impacted by the French Limited site.

D. Further Evaluation of the Brownwood and San Jacinto Monument Sites

Table 7 lists screening characteristics for the two final sites. Additional information was generated for these two

Table 6

**Reasons for Eliminating Two
of the Final Four Remaining Sites**

<u>Wallisville Site</u>	<u>Barrett I Site</u>
Moderately high risk due to required manipulation of hydrology and restoration of a freshwater wetland; wetlands not as easily sustainable as brackish wetlands that could be created at the other two sites	Significant excavation and grading required to lower site elevations for creation of new wetlands; significant manipulation of hydrology would be required so that a freshwater wetland could be supported; not as easily sustainable as the other two sites
Projected subsidence is 1.5 feet by the year 2030	Projected subsidence is 1.5 feet by the year 2030
Large number of landowners makes site acquisition complicated	Quality pine/hardwood uplands would be lost to generate new wetlands
Would probably attract a relatively low number of visitors compared to the other two sites	Would probably attract a relatively low number of visitors compared to the other two sites
Public access to the site is not as good as the other two sites	Public access to the site is not as good as the other two sites; recreational benefits probably limited to Barrett Station and immediate surrounding communities
Preliminary conceptual design contemplates construction of a wave barrier to prevent boat wakes from damaging the new wetland	
Future stewardship of the site is unknown	

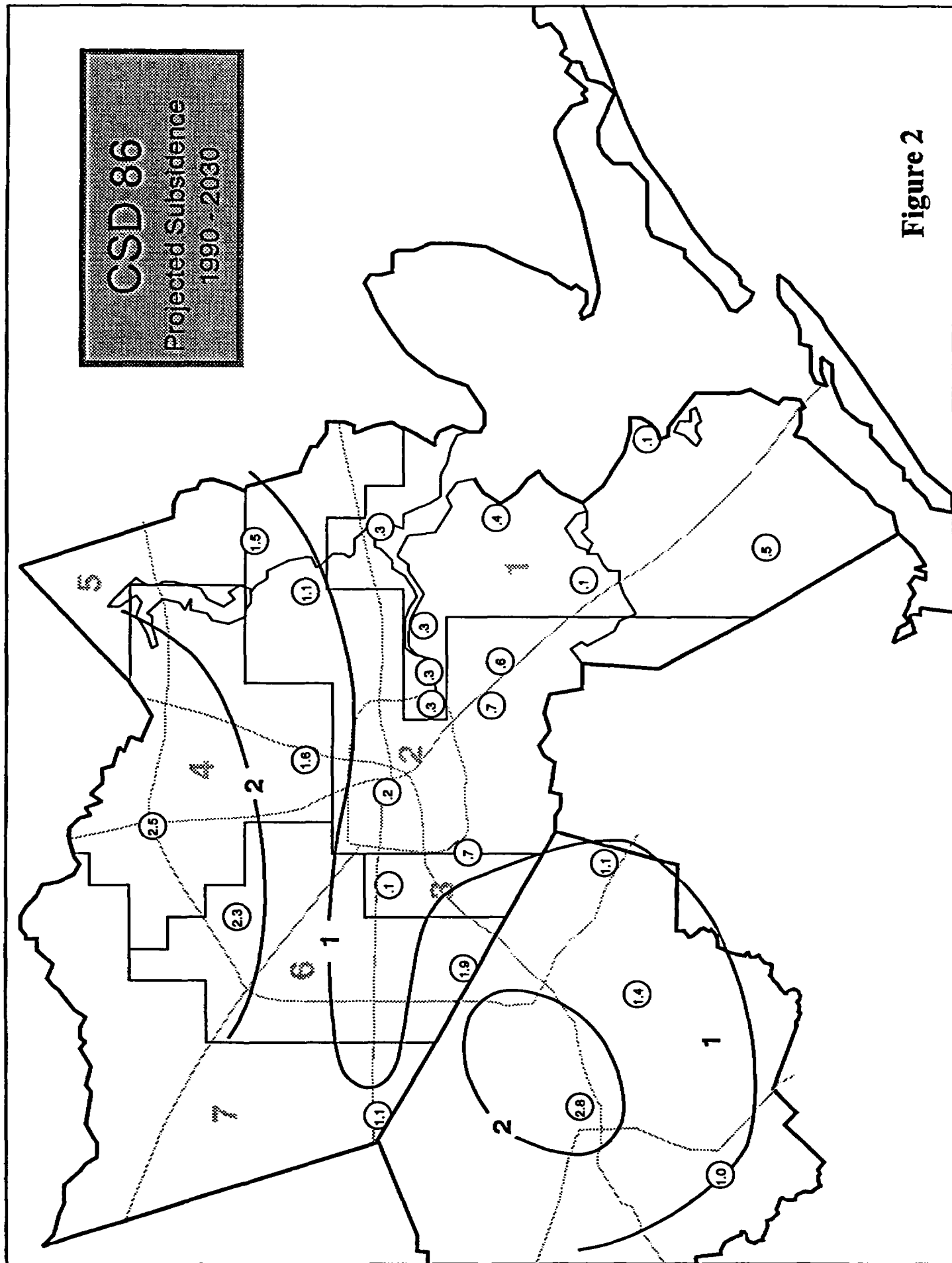


Figure 2

Table 7

**Comparison of Brownwood and
San Jacinto Monument Sites**

Environmental/Technical Criteria:

<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Create/enhance both freshwater and estuarine wetlands	Restoration and enhancement of existing wetlands
Internal area under consideration not subject to wave stress at this time.	High wave stress - significant shoreline stabilization required
Good buffer now - future buffer dependent on remainder of park development	Excellent buffer
Existing hydrologic system adaptable to wetlands creation	Existing hydrologic system easily adaptable to wetlands restoration and enhancement
Highly compatible with planned land use	Very compatible land use
Large site	Large site (approximately 300 acres could be beneficially impacted)
Projected subsidence 0.3 feet by year 2030 (best case)	Projected subsidence 0.3 feet by year 2030 (best case)
Susceptibility to hurricane damage	Moderate susceptibility to hurricane damage
Past site use was as a residential neighborhood with typical residential infrastructure	Past site uses include wetlands/dredged spoil disposal/state park
Can create diverse wetland habitat types	Existing excellent diversity of wetland habitat types

Table 7 (Continued)

**Comparison of Brownwood and
San Jacinto Monument Sites**

Sociological Criteria:

<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Good access	Excellent public access
Good educational/recreational potential	Community benefits - statewide vs. local benefit; Excellent educational/recreational opportunities
Poor aesthetics currently (project would significantly enhance aesthetics)	Excellent aesthetics
City of Baytown willing to own and provide stewardship	TPWD will accept and maintain in perpetuity
Good local community acceptance - does not directly benefit communities impacted by French	Good local community acceptance as well as statewide benefits to public - does not directly benefit communities impacted by French
Possible large number of visitors	Almost 1 million visitors per year
	Restoration may further protect historic resources

Table 7 (Continued)

**Comparison of Brownwood and
San Jacinto Monument Sites**

Political Criteria:

<u>Brownwood Site</u>	<u>San Jacinto Monument Site</u>
Acceptable to regulators	Acceptable to regulators
Moderate distance from French Site	Moderate distance and across river from French Site
City of Baytown community officials very favorable toward this site	Potentially high acceptance from public officials statewide
	TPWD highly favors restoration of this site and will provide assistance

Economic Criteria:

No land cost	No land cost
Land owned primarily by City of Baytown.	Land owned primarily by Texas Parks and Wildlife Department, State of Texas
Fill available on site	Requires importing of fill material
Cost issues: Site preparation; shoreline stabilization	Cost issues: Significant shoreline stabilization cost

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Table 7 (Continued)

**Comparison of Brownwood and
San Jacinto Monument Sites**

Risk Criteria:

Development of site represents relatively low risk	Restoration/creation of new estuarine wetland represents low risk
Projected Subsidence is 0.3 feet by the year 2030	Projected Subsidence is 0.3 feet by the year 2030
	Qualified state personnel available for future management

sites, including an archaeological survey to determine if the project would be likely to disturb or destroy any significant historic resources, and a hydrological study to determine if any unknown technical factors existed that would eliminate one of the two sites.

Appendix D contains the cultural resource report prepared for both sites. Appendix E contains the hydrology evaluations.

Both sites contain prehistoric and historic archaeological material and will require further investigation and possibly mitigation for cultural resources. The hydrologic investigation indicated that the wetlands could be sustained at either site. No data were generated in sampling activities that raised concerns regarding either site.

A preliminary construction cost estimate was prepared for each of the two sites based on implementation of the preliminary conceptual designs. The shoreline stabilization cost and reconstruction and reinforcement of the levee along Santa Anna Bayou were found to be expensive. Without performing these two initial steps (which do not involve the actual creation of any new wetlands), constructing the project at the San Jacinto Monument Site simply would not make sense because the entire area could eventually be lost to shoreline erosion. A high percentage of any budget for wetlands development at the Monument site would be devoted to these two elements rather than to the creation of new and beneficial wetland habitat.

While some shoreline stabilization is shown on the preliminary design for the Brownwood Site, it was found that sufficient acreage exists inside of the road looping the site to build the project. As a result, the existing shoreline would serve as a wave barrier and would provide sufficient protection for the new wetland. Because of this, more of the construction budget could be devoted to the creation of valuable wetland habitat at Brownwood rather than being devoted to construction of physical structures required to control natural forces.

IX. Final Site Recommendation and Justification

The Brownwood site is recommended for the following reasons:

- The internal area of Brownwood is not subject to wave stress at this time;
- Wetlands creation at this location is extremely compatible with planned land use;

- Wetlands creation at this location will not adversely impact high quality habitat;
- The existing hydrologic system is easily adaptable to sustain a wetlands area;
- A diversity of wetland types can be created at this site, including brackish marsh and seasonal freshwater pools;
- Large trees left standing on "islands" within the wetlands area will increase habitat diversity and provide excellent nesting and resting areas for birds;
- The project will greatly enhance an area that is currently in need of treatment;
- The site is centrally located and easily accessible to the public so that citizens from all over East Harris County can enjoy it as well as other citizens from a broader area;
- Qualified personnel are available to maintain the wetlands area;
- Extensive shoreline stabilization is not required;
- The site can be graded to create necessary elevations for emergent vegetation;
- This site represents the lowest risk of any site evaluated -- it is clearly capable of supporting a high-quality and sustainable wetland.

Figure 3 depicts a revised preliminary conceptual design for the wetlands project at the Brownwood Site. While preliminary, this design shows that the project can be developed in accordance with the criteria of the Consent Decree utilizing land that City of Baytown has agreed to make available to FLTG. This property is within the loop road inside Brownwood, protected from wave stress. Figure 4 presents sections further illustrating the conceptual design.

Analysis of this design indicates that the entire project would develop 59.8 acres as follows:

Marsh Grass Zone	20.8 acres
Open Brackish Water	16.8 acres
Upland Edge	8.0 acres
Woodland	13.4 acres
Fresh Water Pools	0.8 acres
TOTAL	59.8 acres

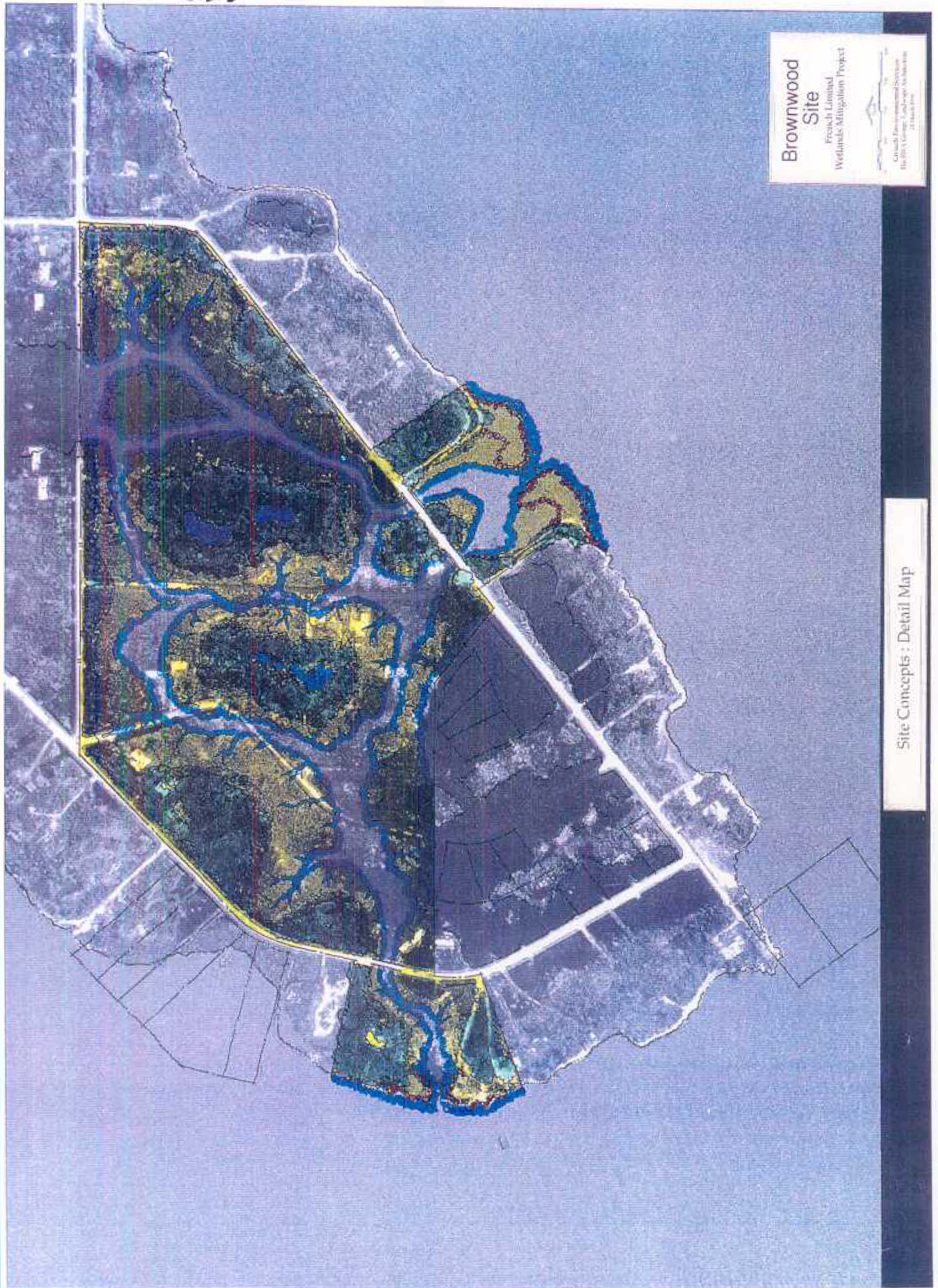


Figure 3



DETAIL TYPICAL SECTION



OVERALL TYPICAL SECTION

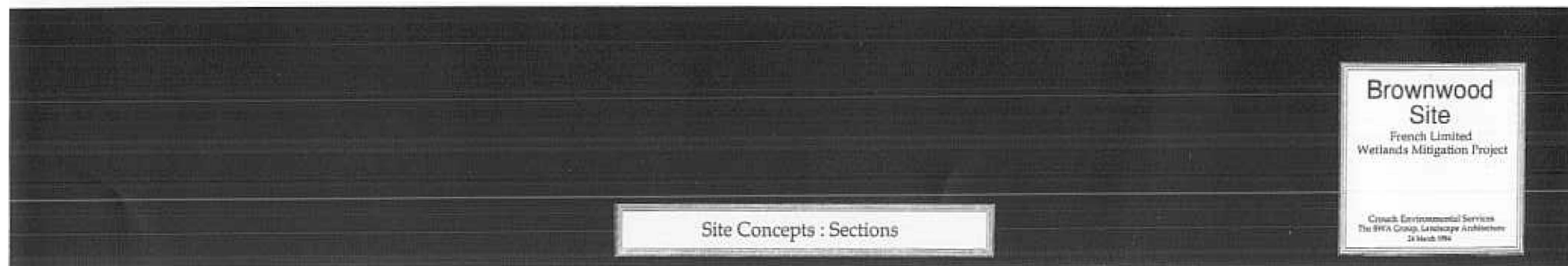


Figure 4

X. Presentation to Project Review Group

On March 25, 1994 CES and FLTG presented the analysis of the final two sites and the site selection recommendation to the Project Review Group. FLTG previously notified the Group of its selection in accordance with the Consent Decree deadline. The Group unanimously approved selection of the Brownwood Site.

The Consent Decree allows nine months to develop a detailed design for the project. This design, or "marsh restoration plan" is due on December 10, 1994. The Project Review Group must approve the plan. The Group provided valuable feedback regarding elements of the design for Brownwood that will be incorporated into the plan.

BOOKMARK

Appendix A

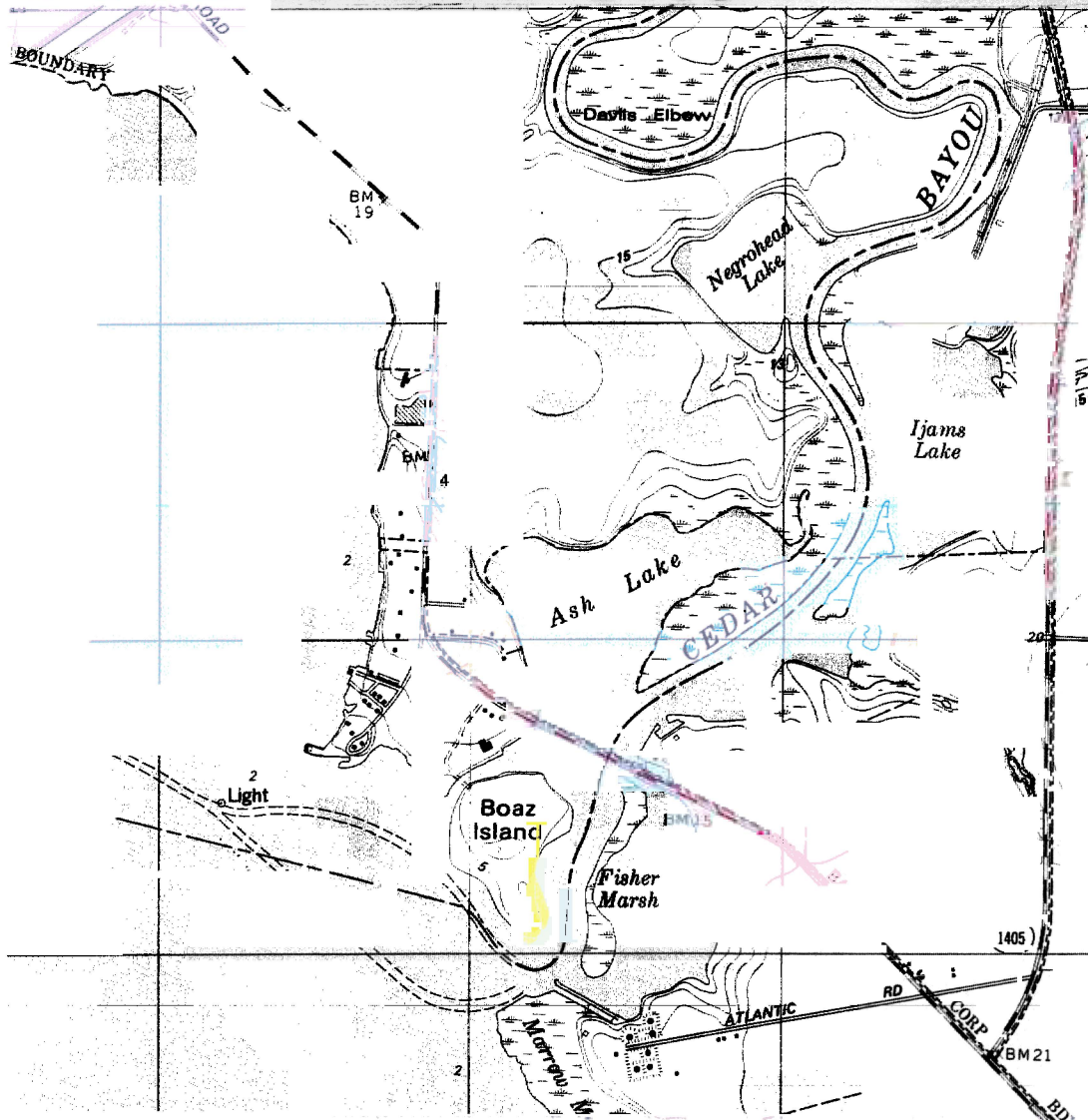
80528

Appendix A

28 Sites Shown on Topographic Maps

01502466

Boaz Island Site



Characteristics:

**Highly
inaccessible**

**Residence on
island serviced by
private bridge**

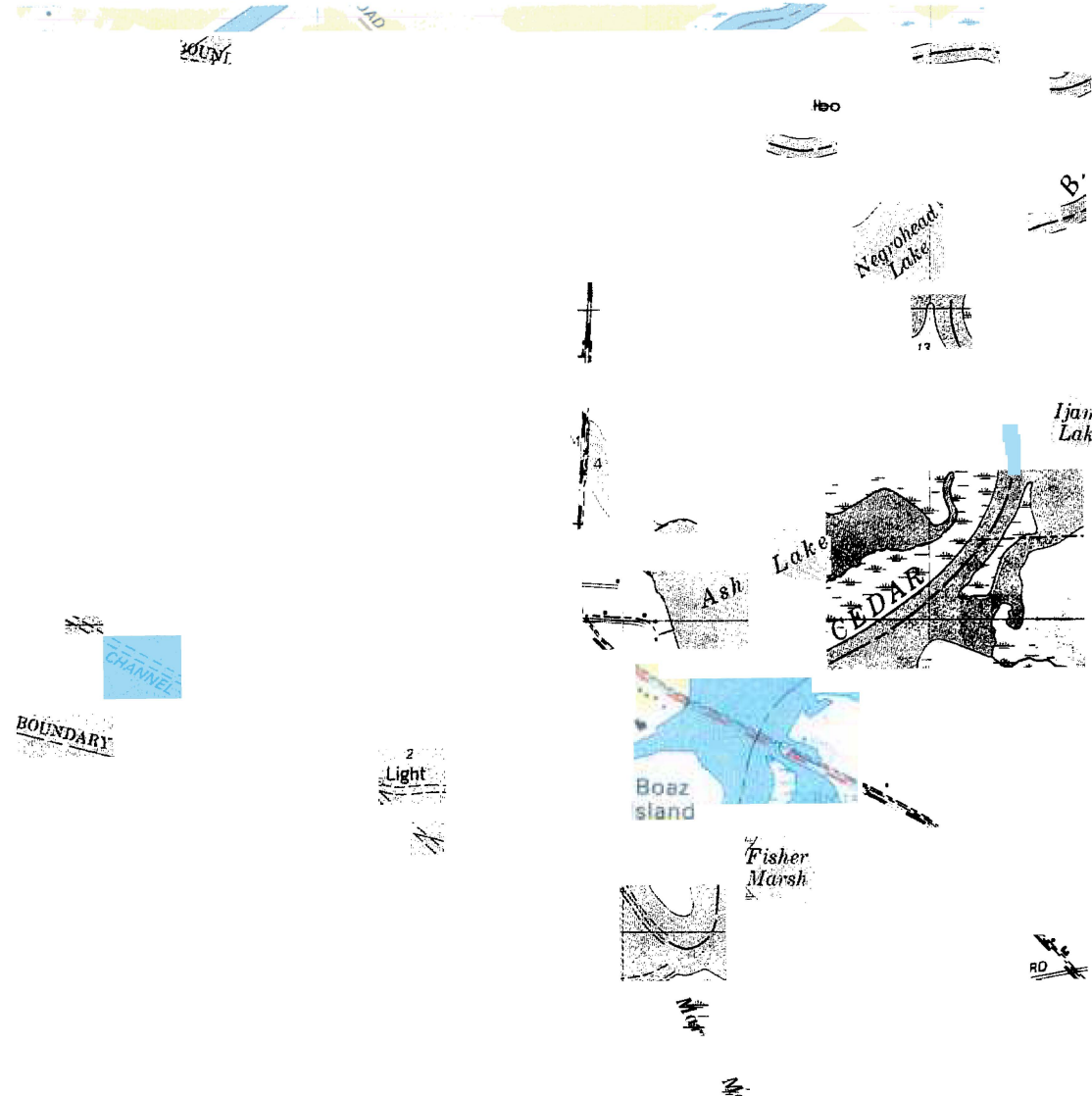
**Existing wetland
area on-site**

- **Minimal
expansion or
enhancement
possibilities**

French Limited Wetlands Mitigation

080529
602080

Plantation House Site



Characteristics:

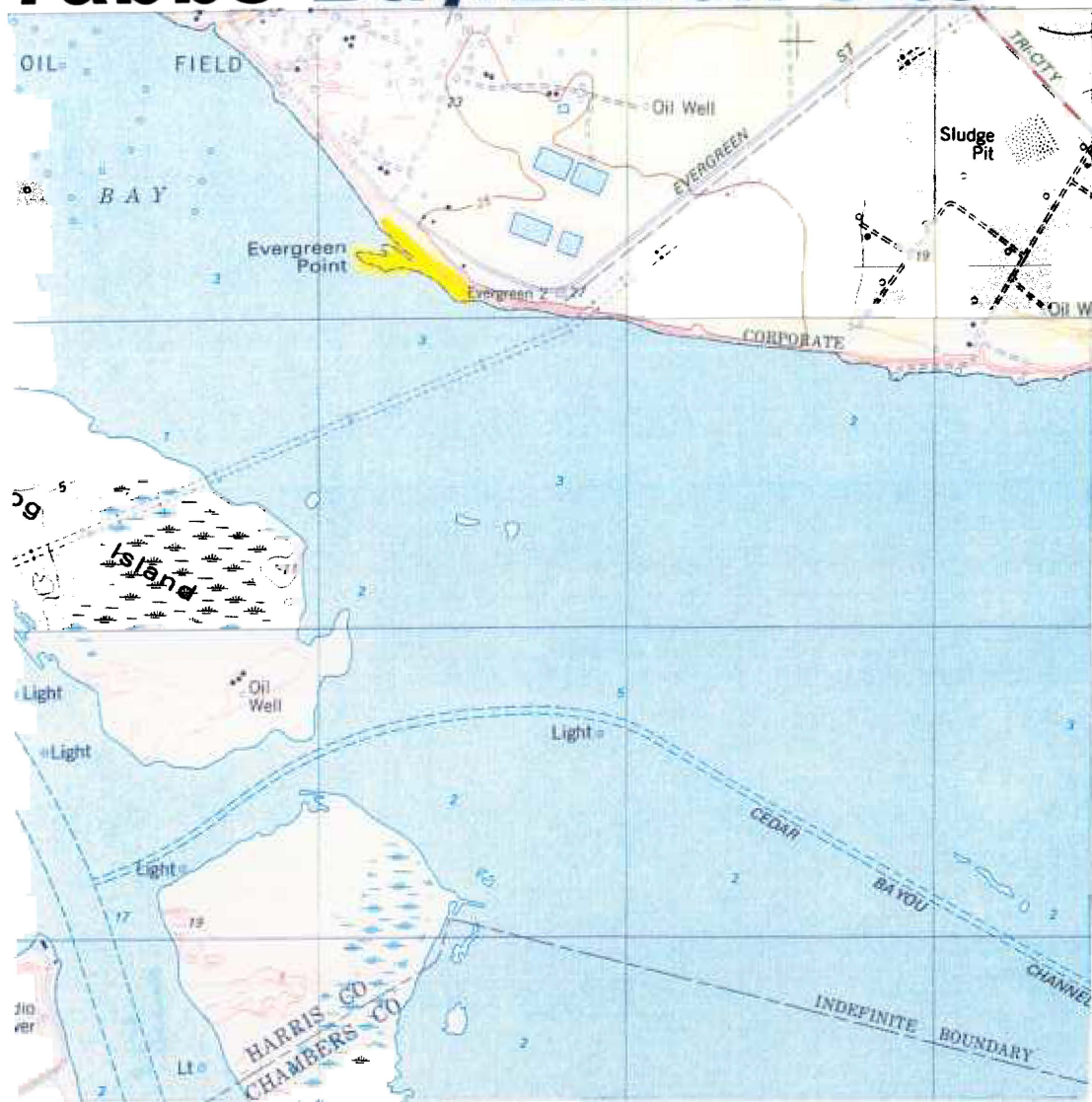
Existing high quality wetland

Grades from tidal marsh to upland

Near residences

Minimal expansion or enhancement opportunity

Tabbs Bay/Exxon Site

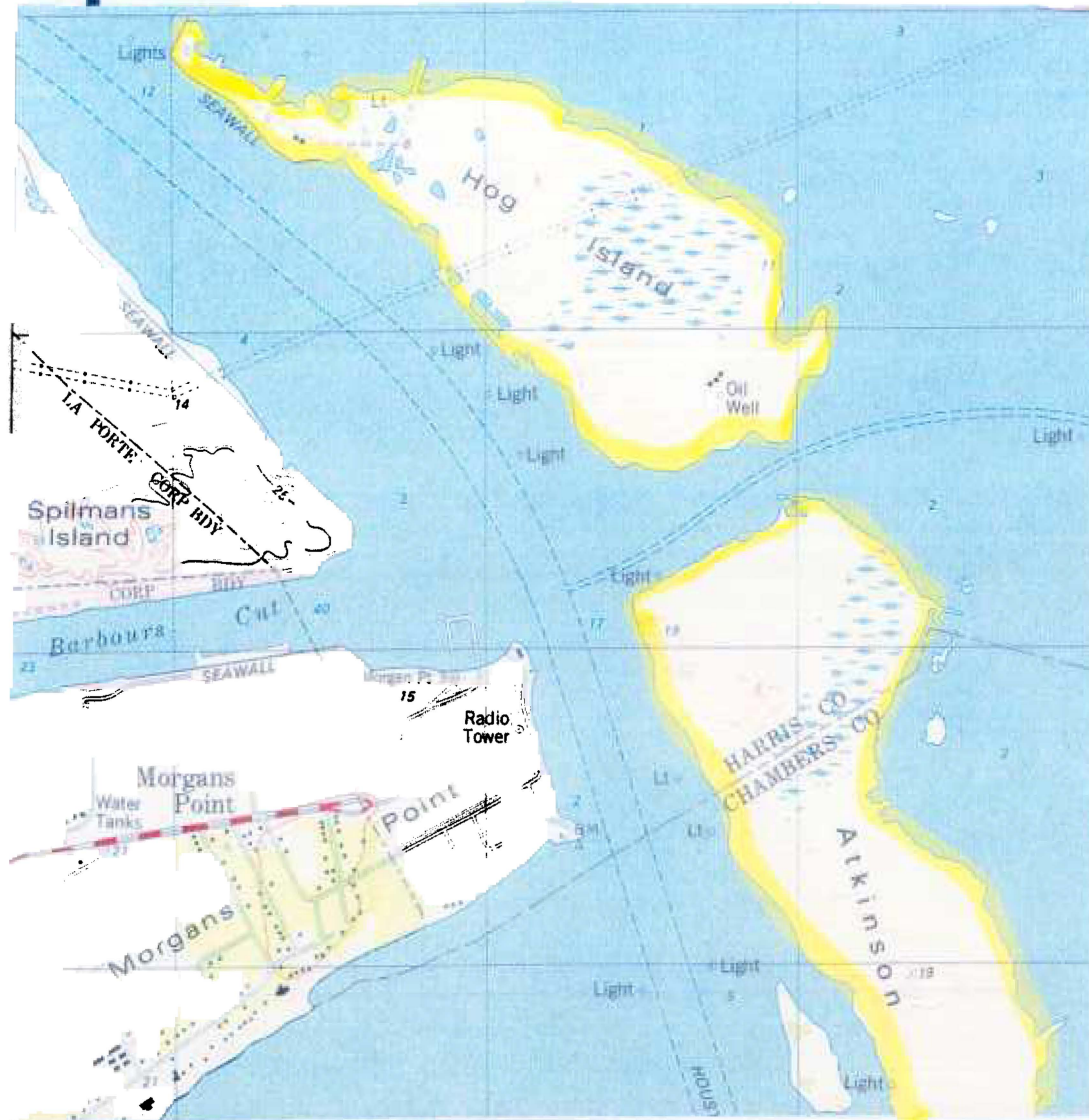


Characteristics:

- **USFWS wants edge cleaned up and enhanced**
- **Steep banks - lots of excavation to create additional wetland acreage**
- **Good access**
- **High wave stress**
- **Near subdivision**
- **Many working wells in bay**

French Limited Wetlands Mitigation

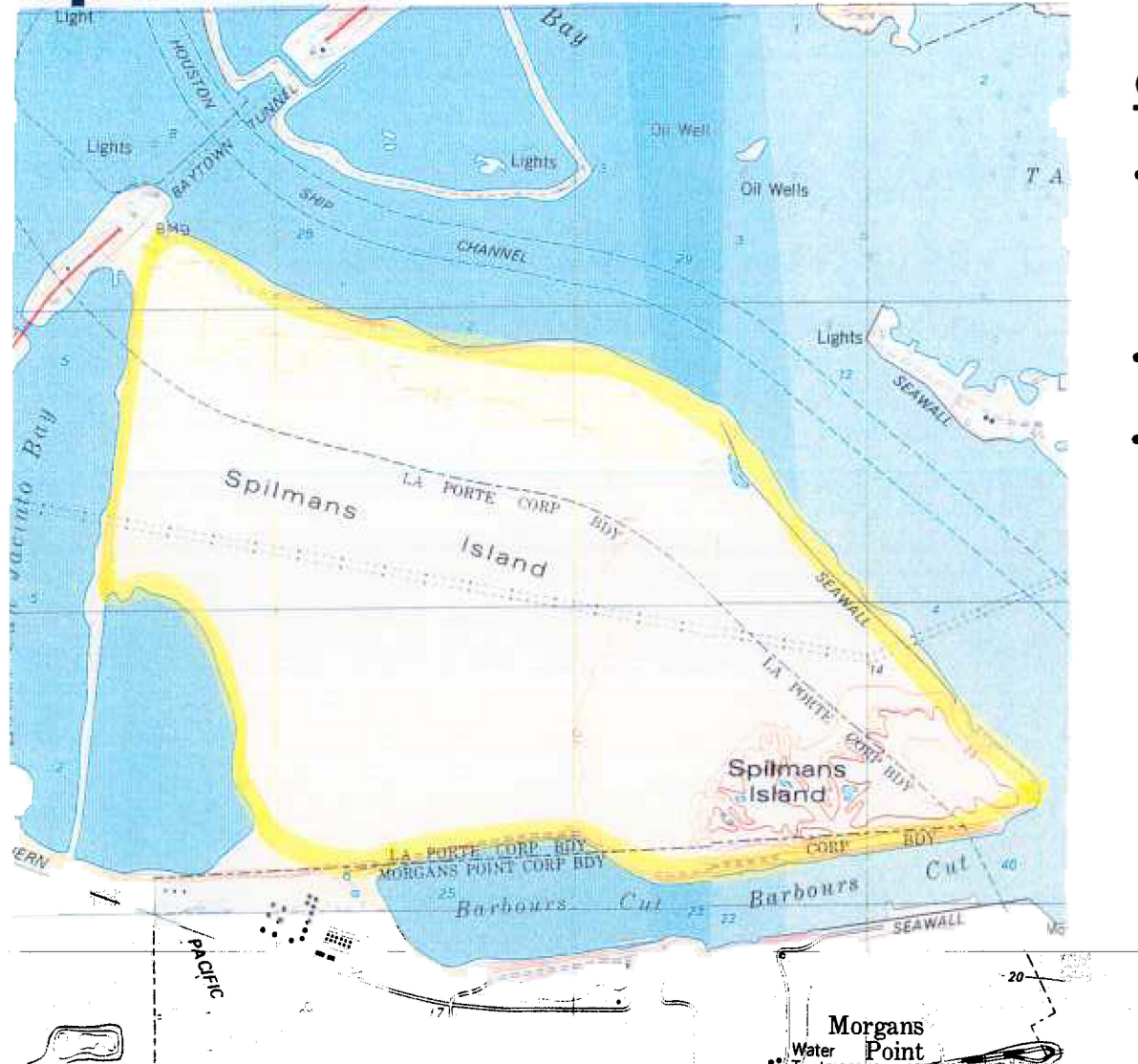
Spoil Islands



Characteristics:

- No public access
- High wave stress
- Difficult access for construction equipment
- Built through dredged spoil deposition
- Easily enhanced
- Large amount of acreage available

Spilmans Island Site

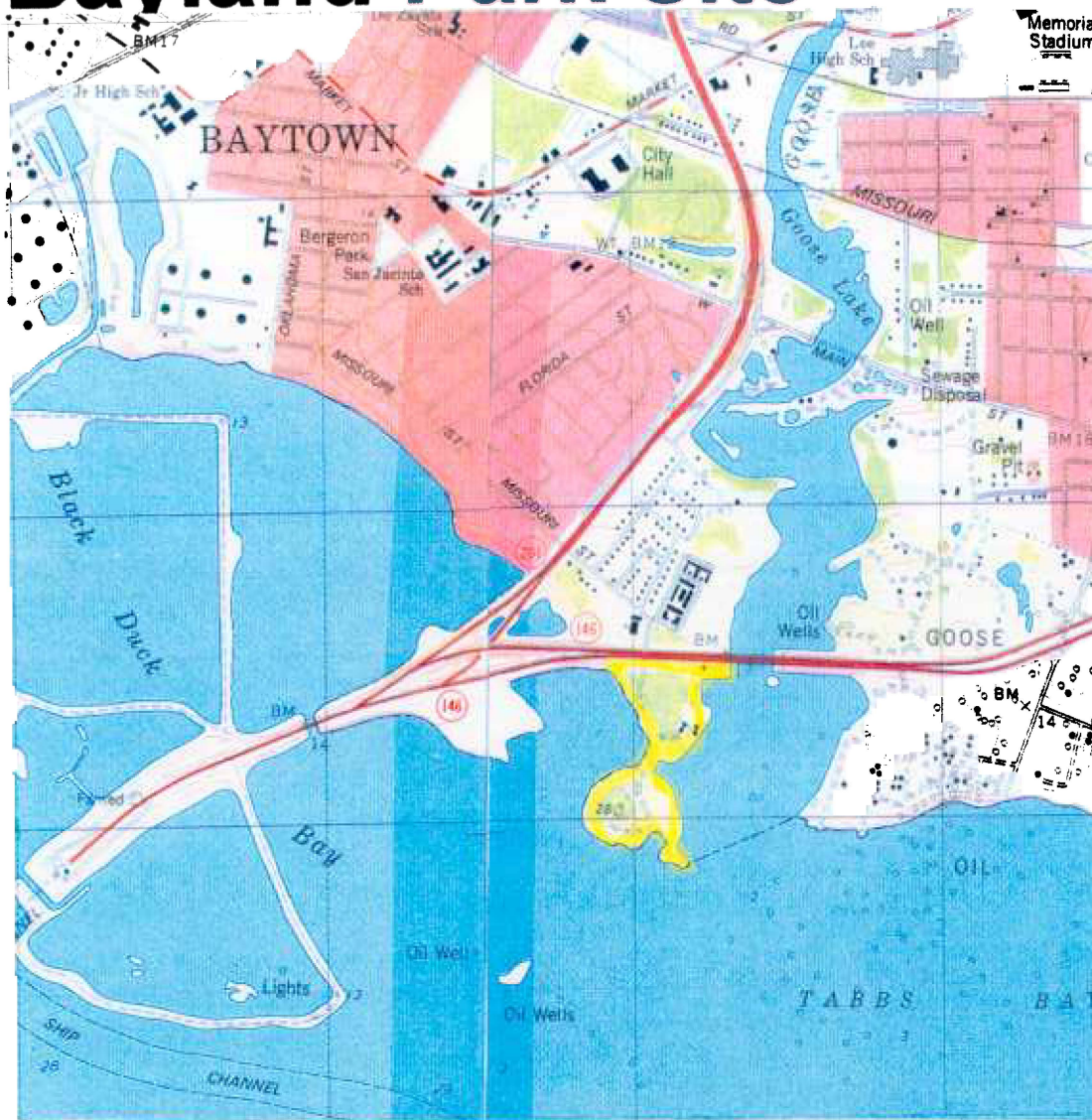


Characteristics:

- Apparent on-going spoil deposition
- Inaccessible
- Does not appear to be a suitable site

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Bayland Park Site

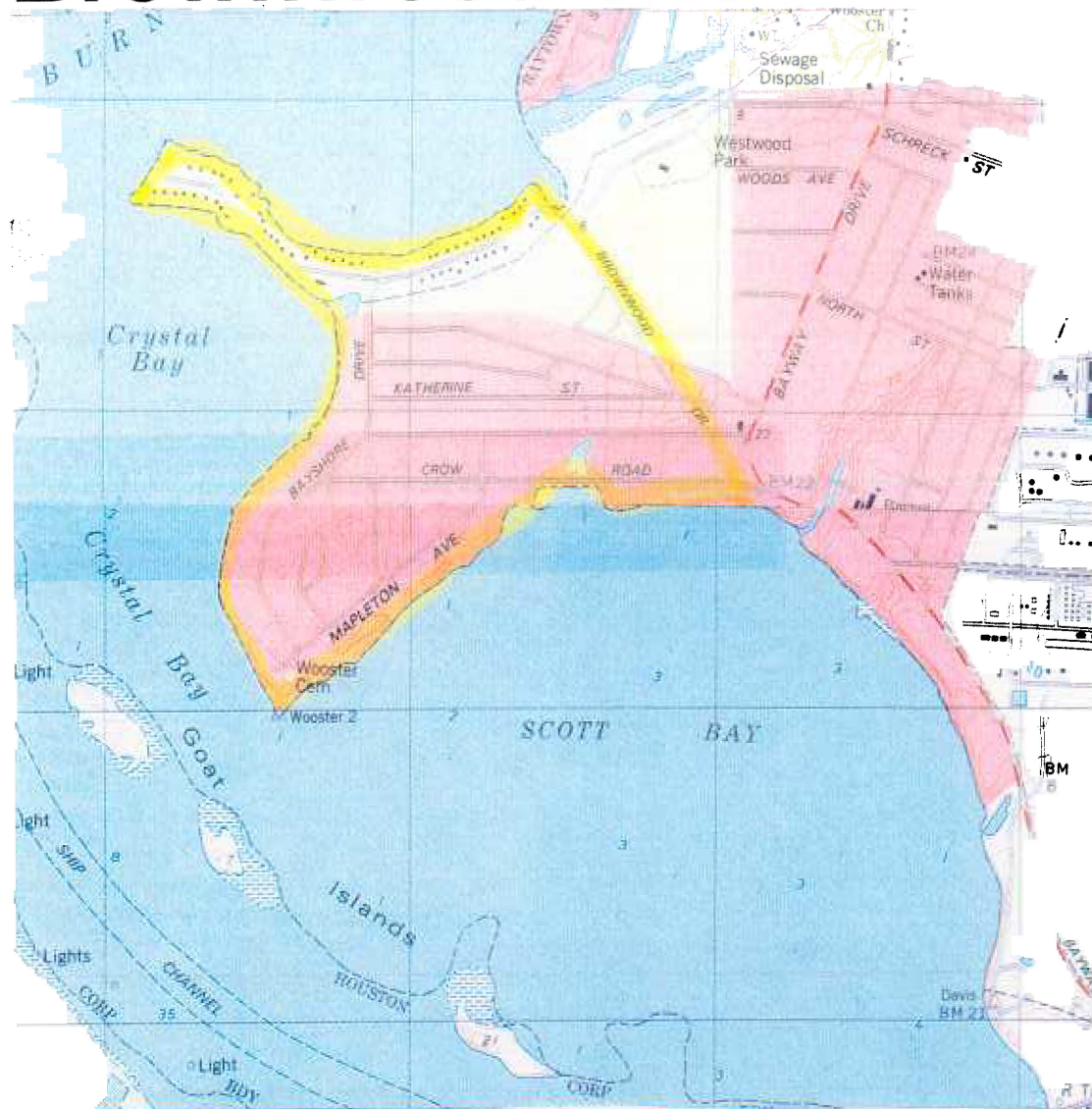


Characteristics:

- City of Baytown park
- Good Public access
- Significant excavation required
- Looks intentionally built up through dredged spoil deposition
- Very limited possibilities

French Limited Wetlands Mitigation

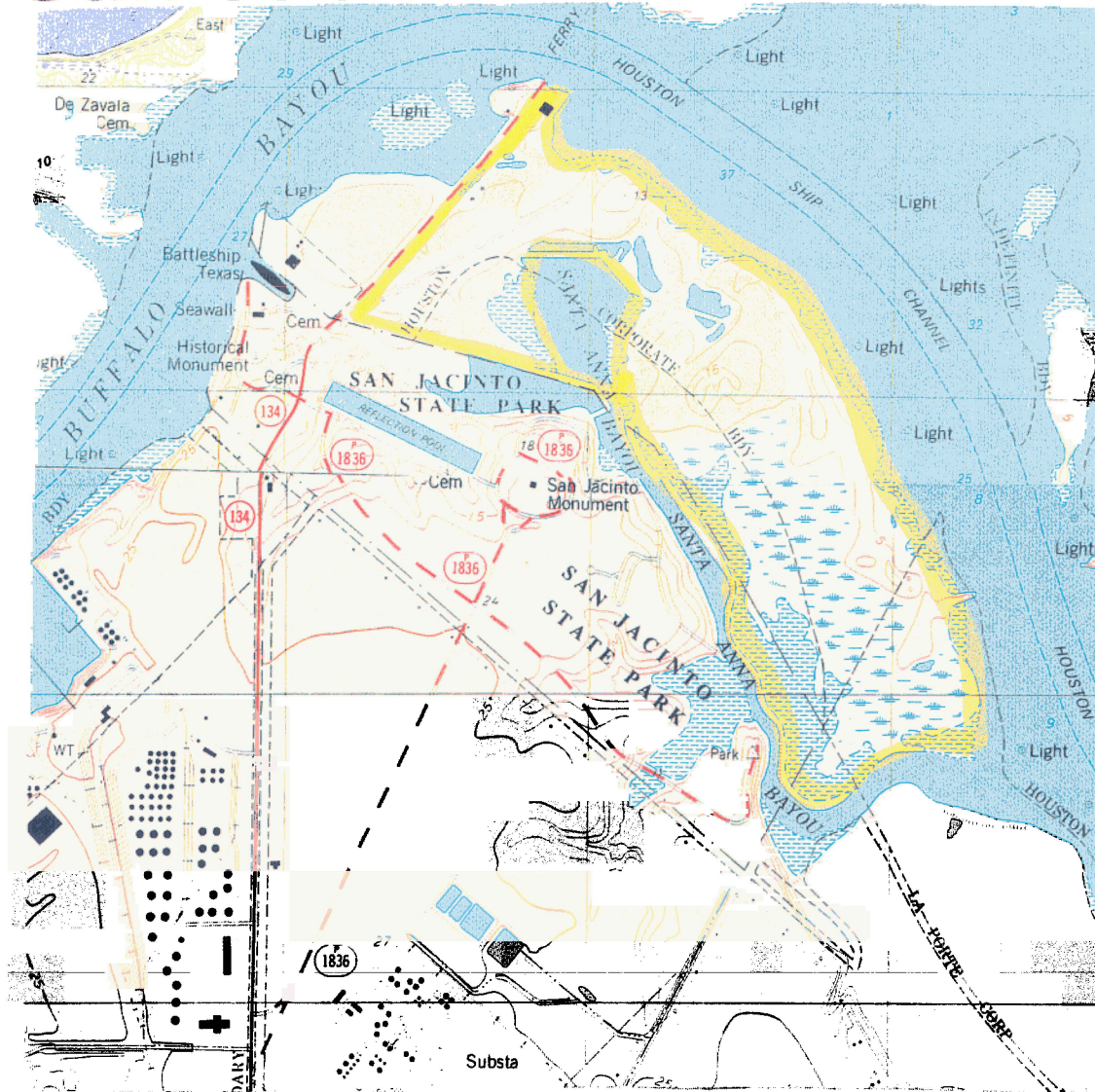
Brownwood Site



Characteristics:

- Owned by City of Baytown - park planned
- Good access
- High wave stress/erosion potential
- Create both fresh and estuarine wetlands
- Good buffer now; poor once park is developed

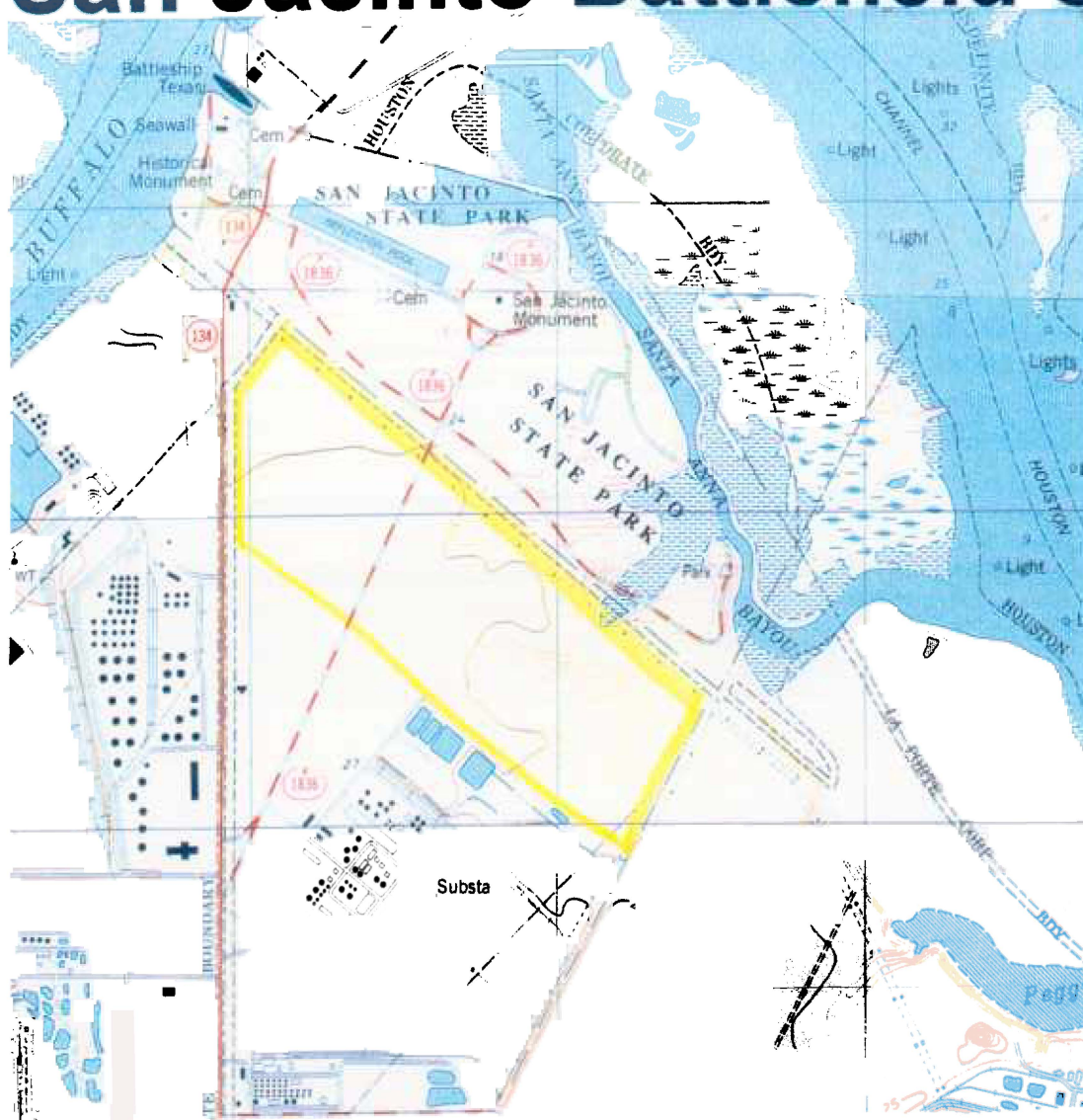
San Jacinto Monument Site



Characteristics:

- **State-owned**
 - 3 existing wetland types**
 - Good public access with good buffer**
- **TPWL wants to restore and create wetlands**
- **View from monument and ship channel**
- **Tidal influence**

San Jacinto Battlefield Site



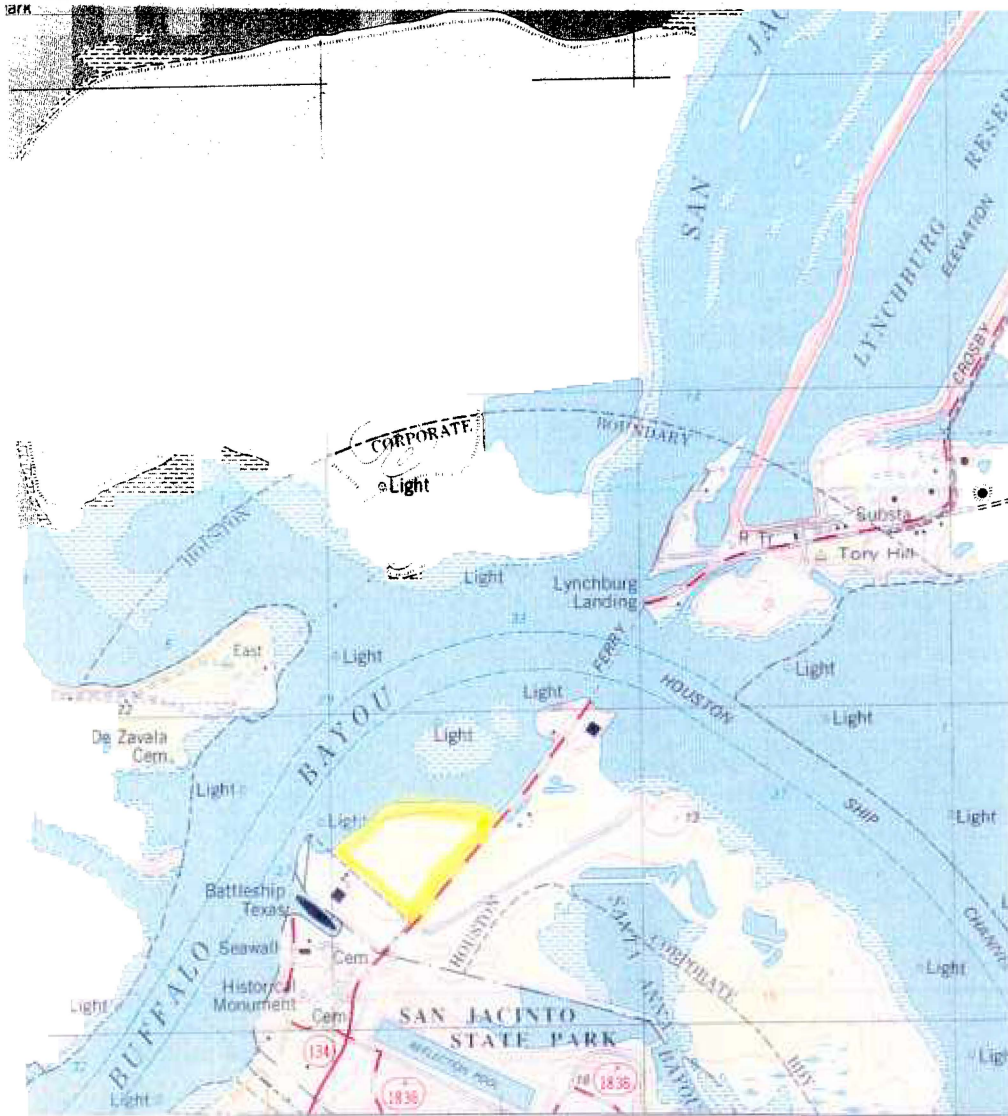
Characteristics:

State-owned

- **Public Access**
- **Possible historic sites**
- **Heavily wooded with existing central wetland**
- **ROW interferes with aesthetics**
- **View from monument**
- **Poor buffer**

French Limited Wetlands Mitigation

San Jacinto Inn Site

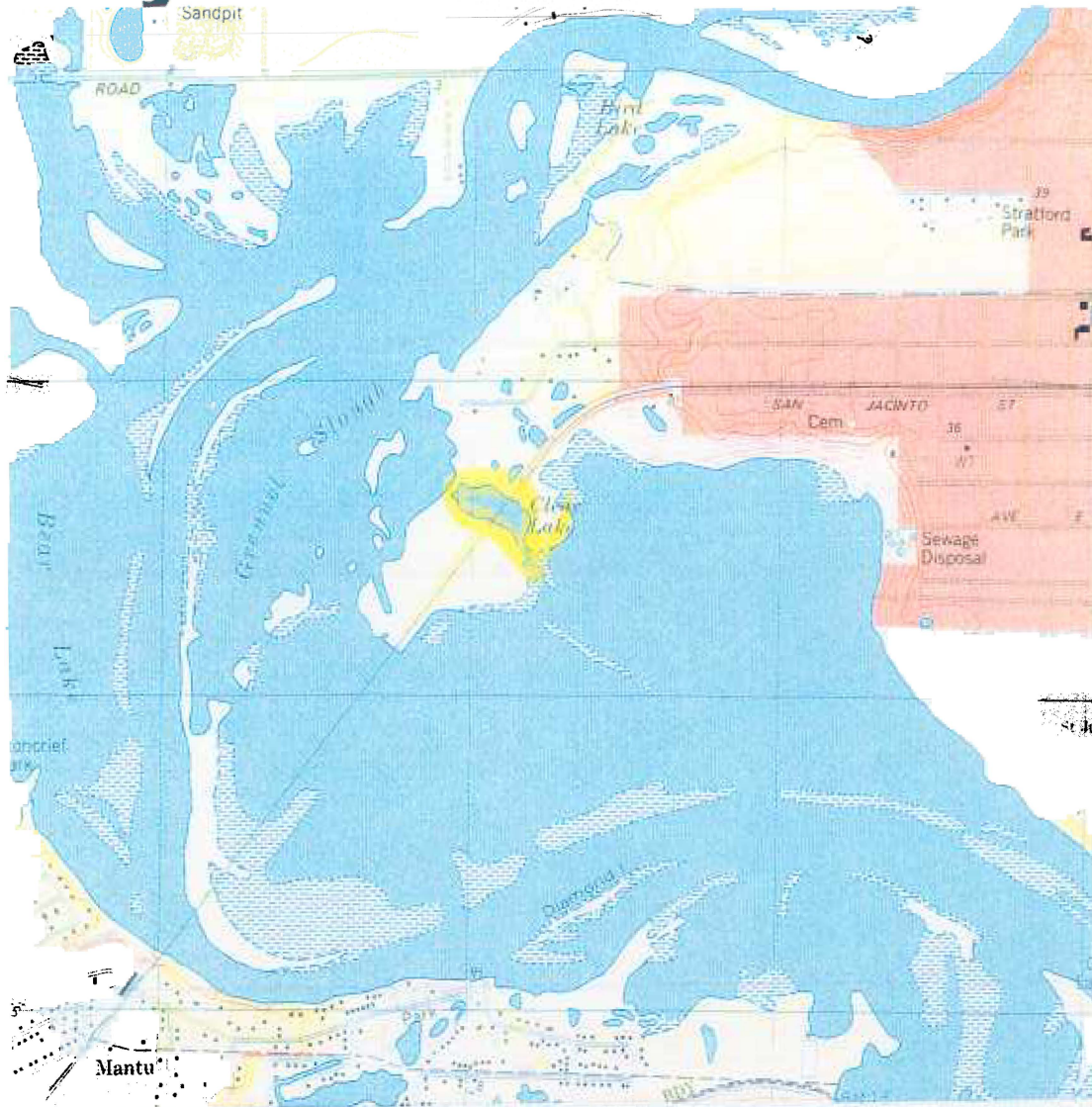


Characteristics:

- **High elevation above MSL**
- **Possible dredged spoil site**
- **View from monument**
- **Close to populated areas**
- **View of ship channel from site**
- **Low quality vegetation currently covers site**

French Limited Wetlands Mitigation

Baytown Boat Club Site



Characteristics:

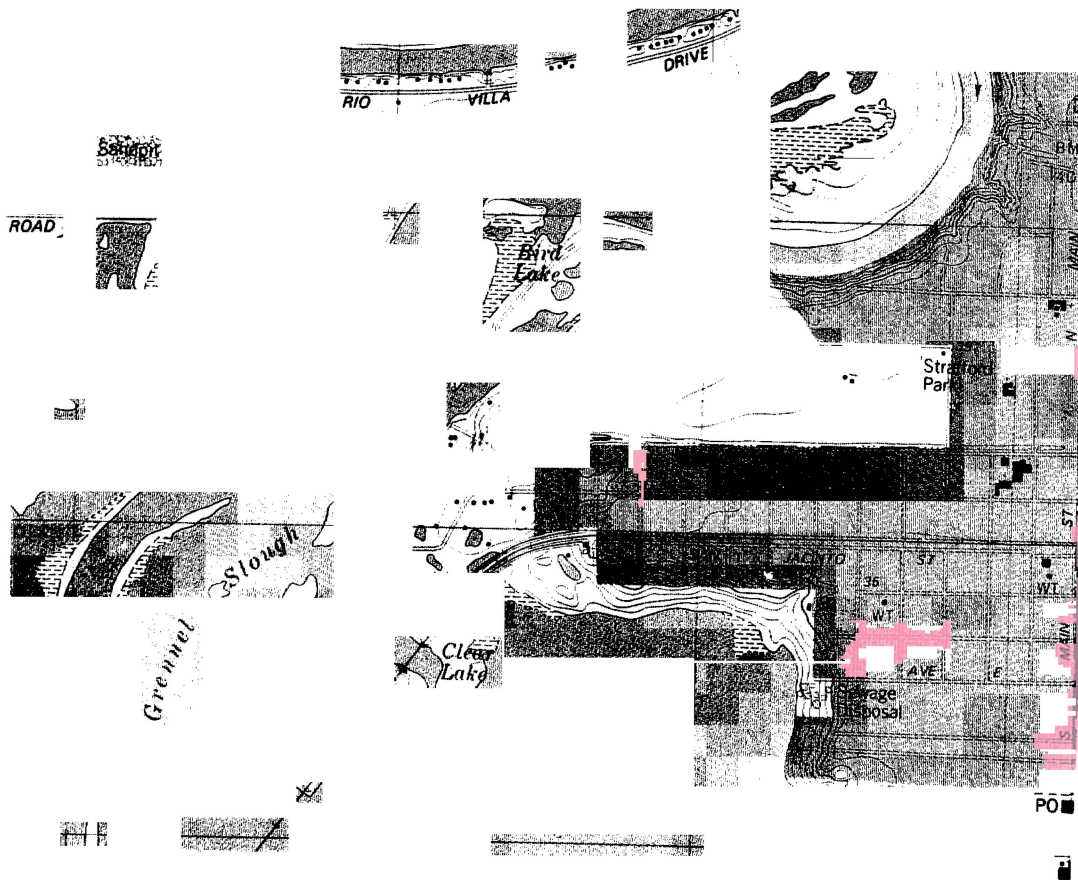
**Existing quality
forested wetland**

**Very little
expansion
possibility**

**Immediately
adjacent to
subdivision**

- **Highly accessible**
- **Poor buffer**

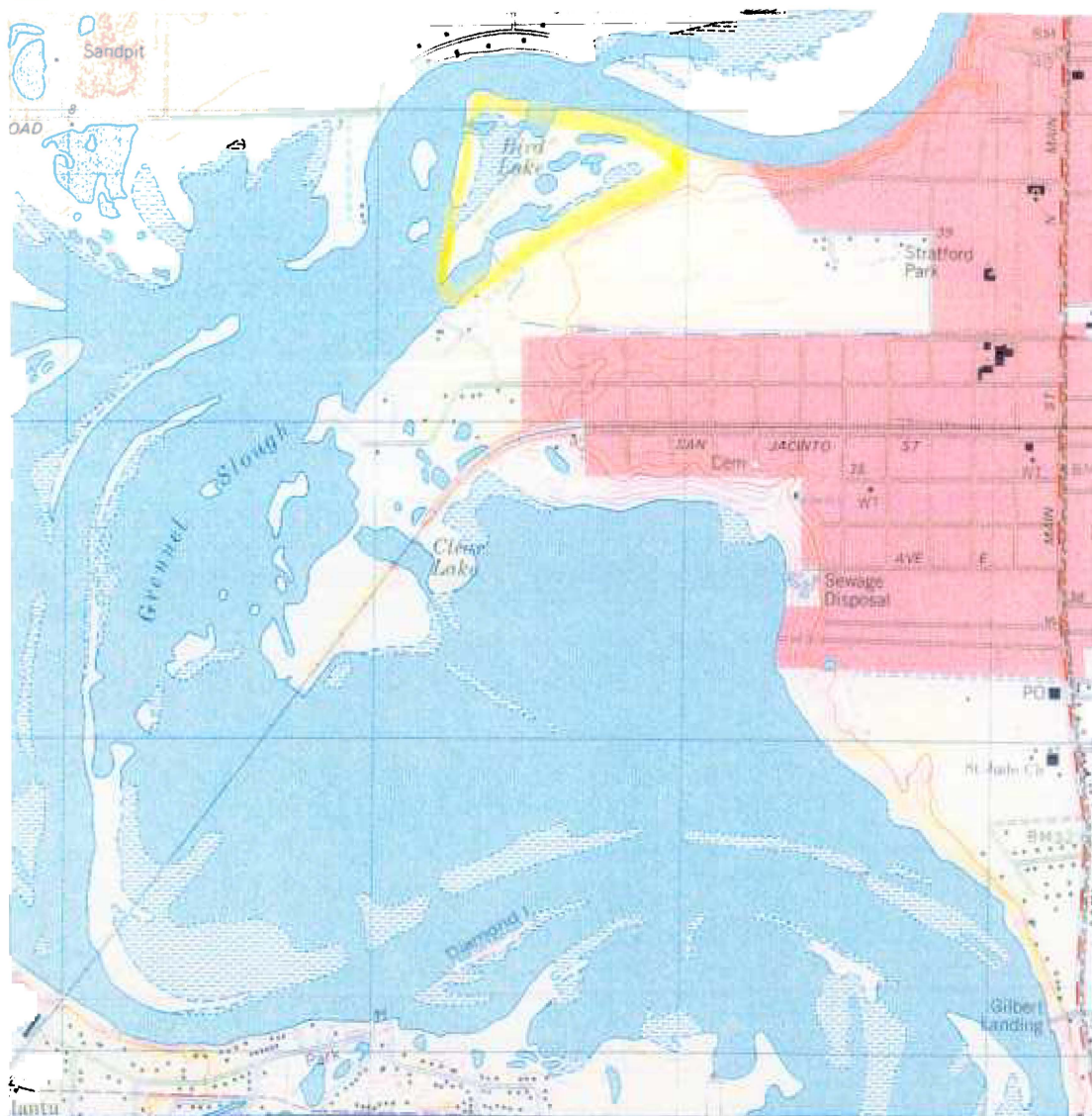
Tugboat Annie's Site



Characteristics:

- Private boat launch
- Pine/Hardwood forest down to water's edge
- No existing wetlands
- Significant excavation required
- Very poor buffer

Bird Lake Site

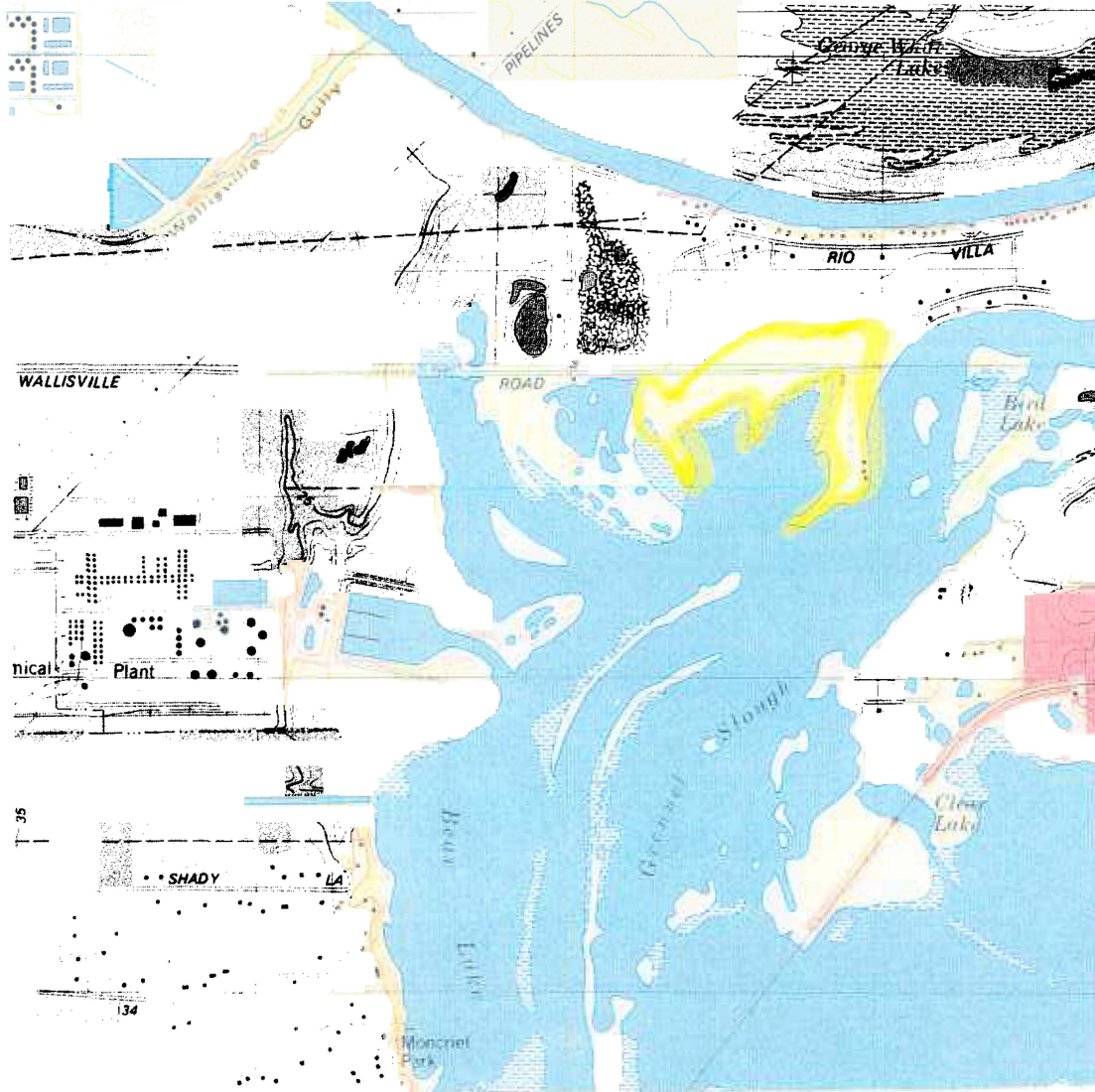


Characteristics:

- Inaccessible by vehicle
- Existing quality wetland
- Expansion and enhancement possibilities limited

French Limited Wetlands Mitigation

Wallisville Road Site



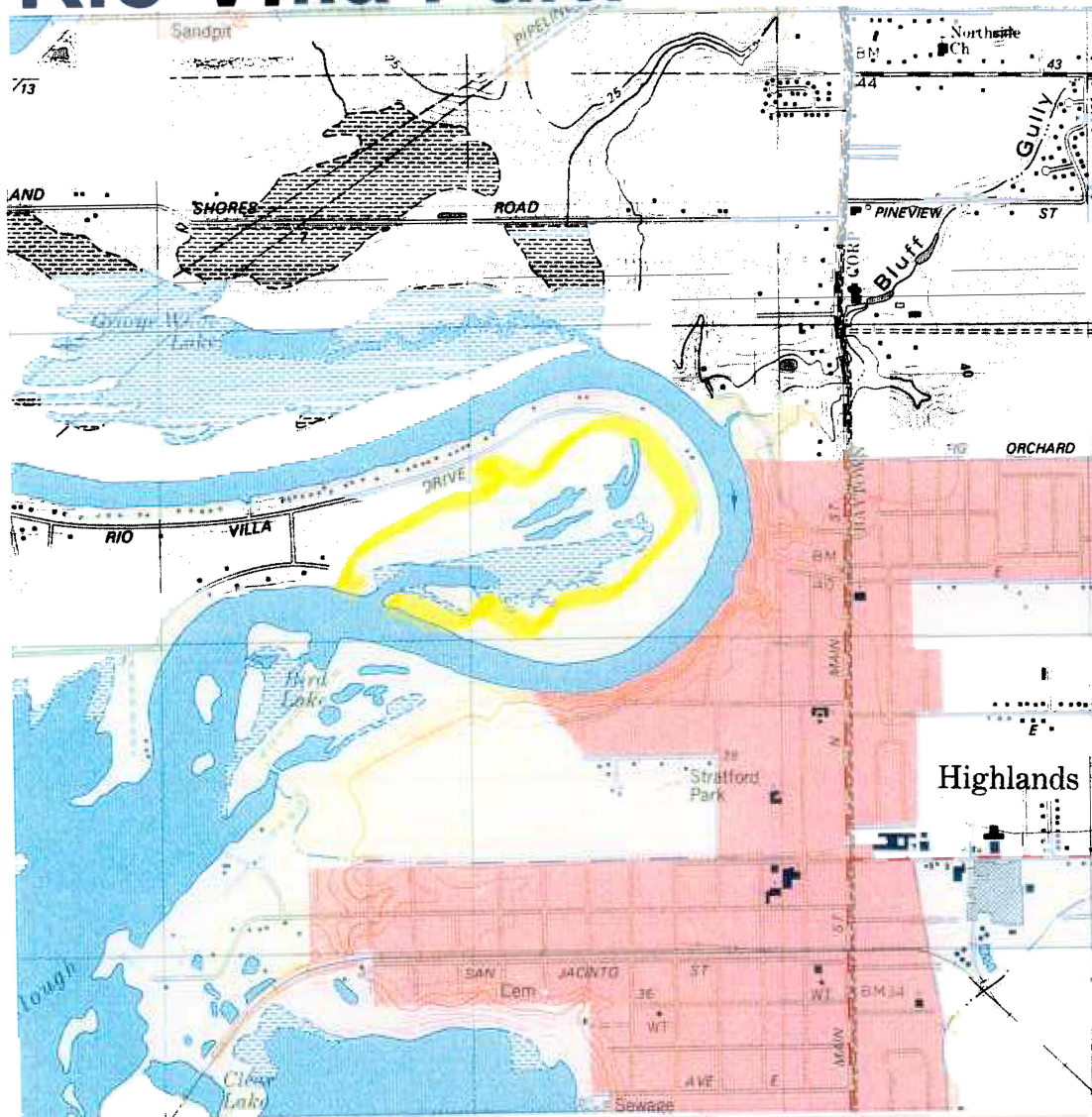
Characteristics:

Moderate Access

- **Existing high quality wetland**
- **Potential enhancement to tidally influenced fresh marsh**
- **Close to homes**
- **Wave Stress**

Good surrounding buffer

Rio Villa Park



Characteristics:

- Existing high quality fresh marsh and forest
- Limited Access
- Good Buffer
- Can enhance or expand
- Significant excavation
- Close to FL Site
- Low Wave Stress

Highland Shores Site



Characteristics:

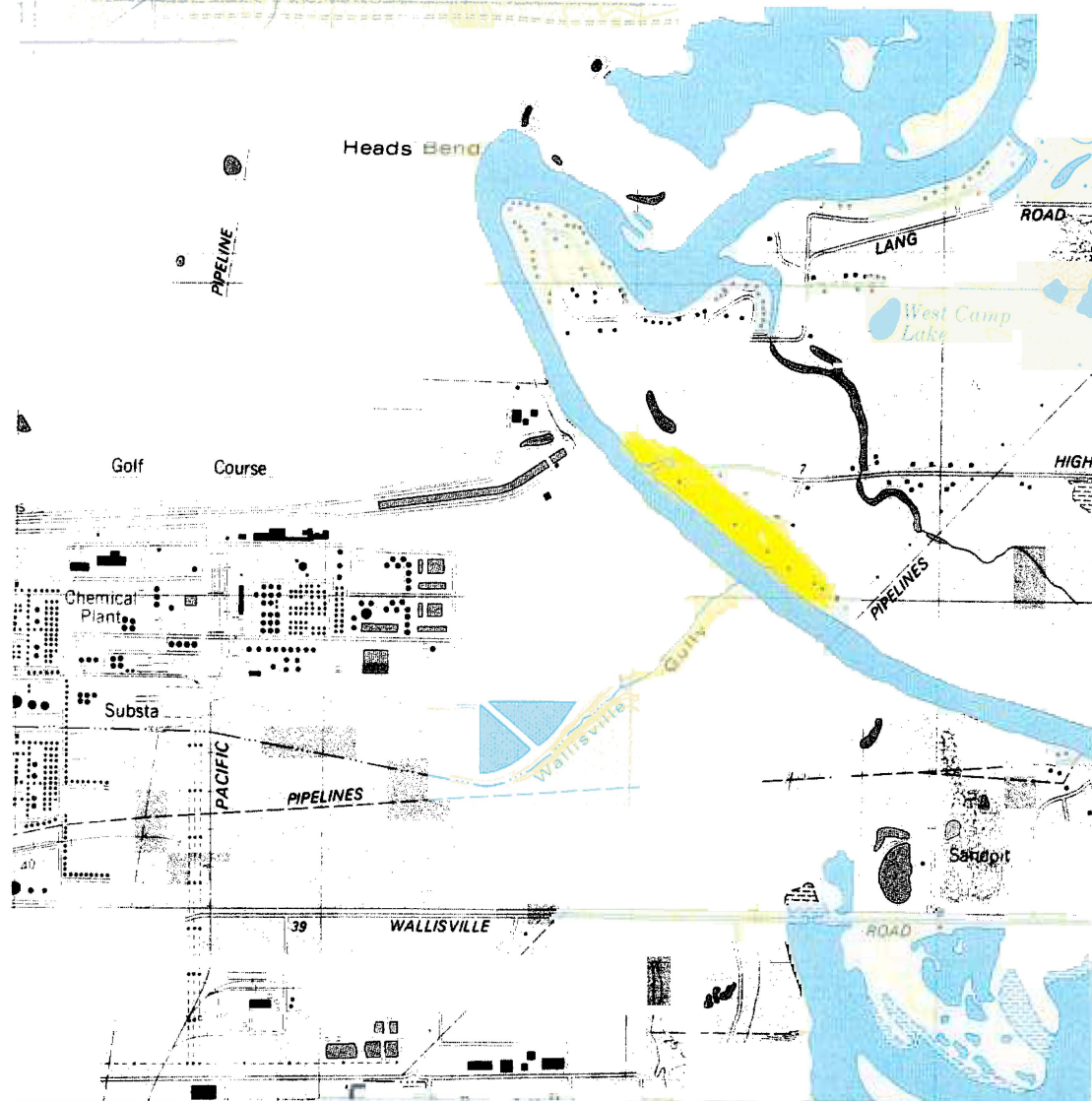
- Existing high quality fresh marsh and forested wetland
- Moderate access
- Good Buffer
- Could be enhanced

Very large area

- Near Highlands, fairly close to FL Site

French Limited Wetlands Mitigation

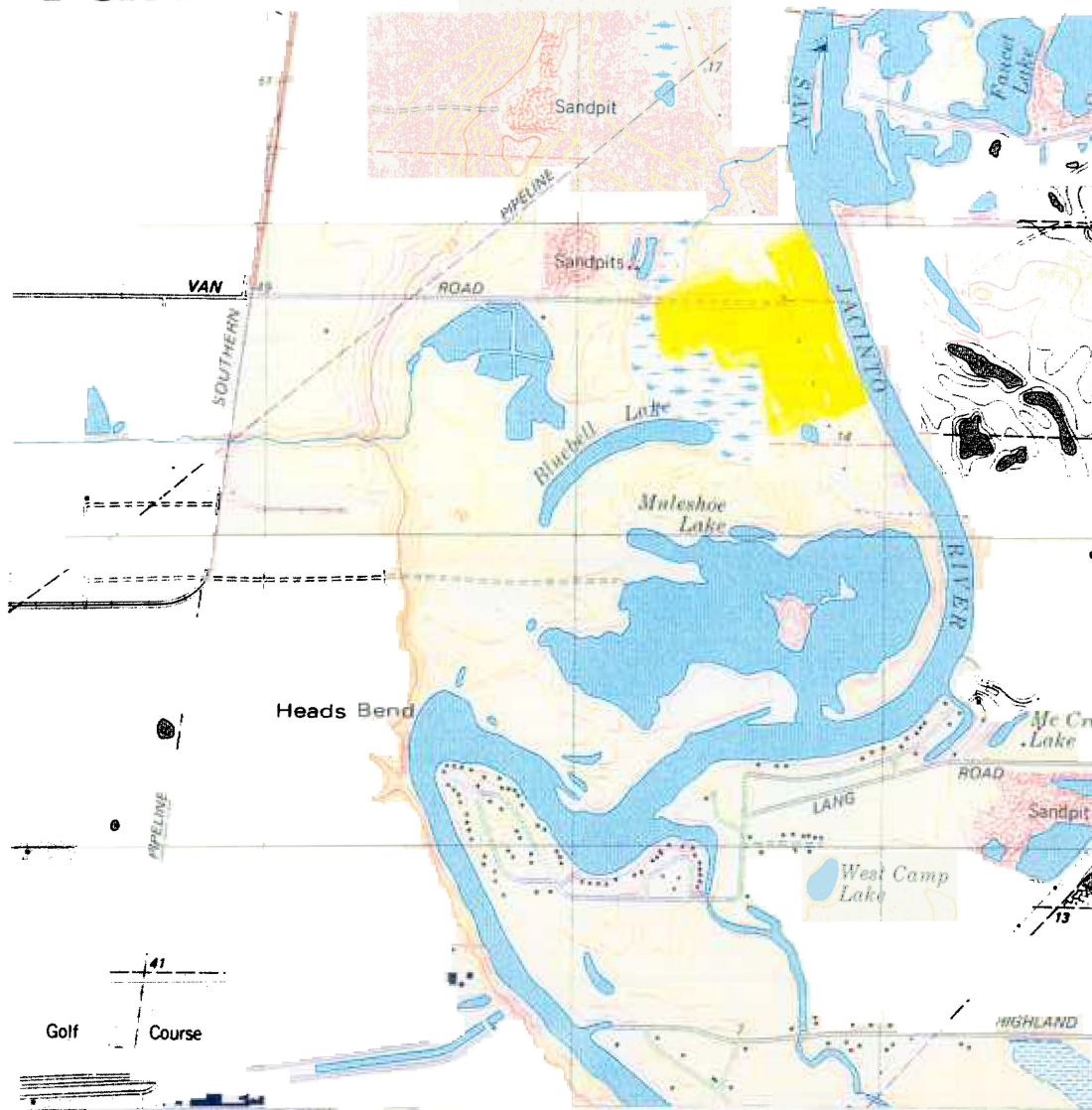
Highlands Site



Characteristics:

- **Mixed pine-hardwood forest**
- **High in elevation**
- **Significant excavation required**
- **Would involve creation of entirely new wetland site using a slough from the river as the hydrological connection**

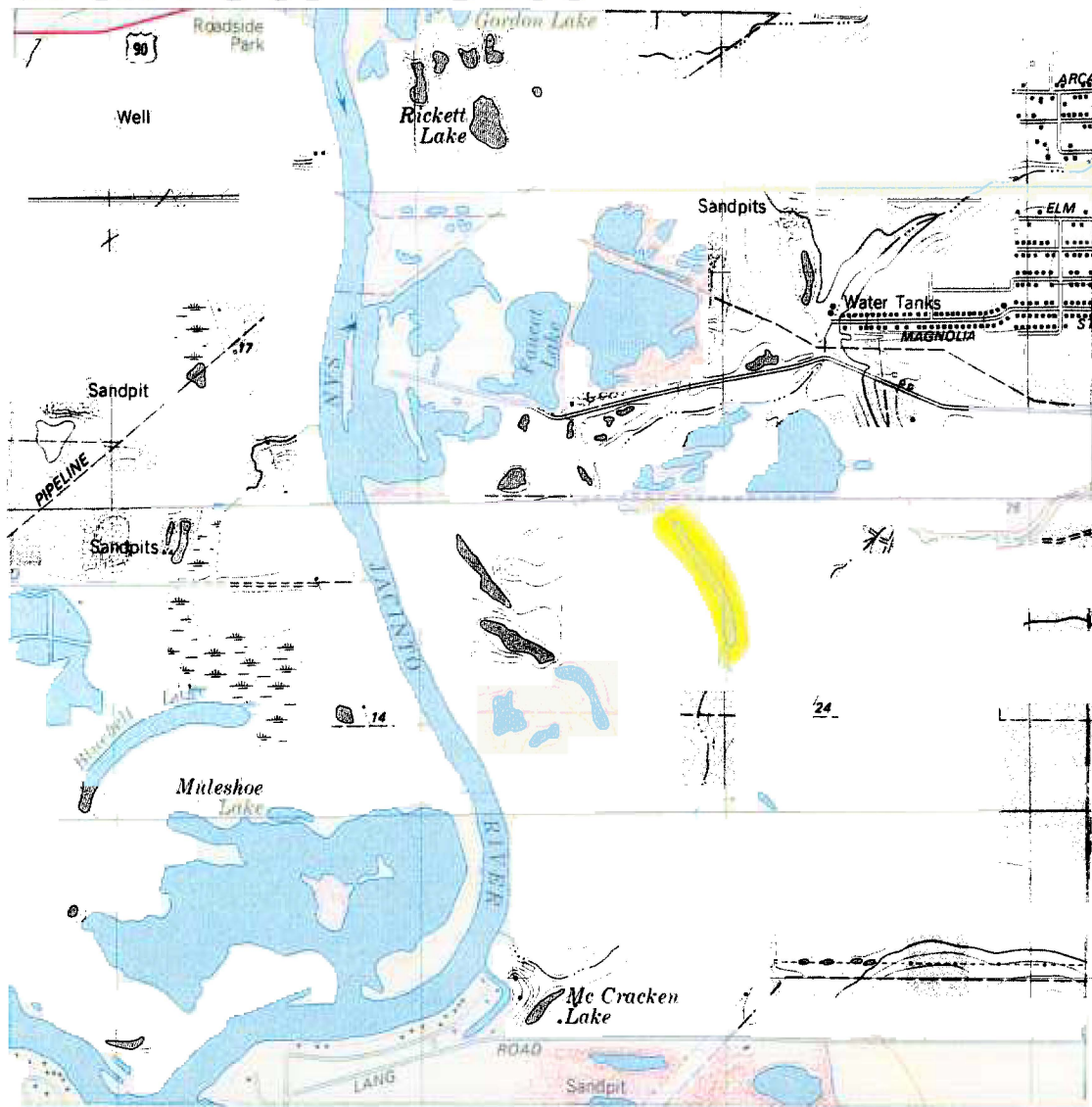
Van Road Site



Characteristics:

- Existing large, high quality forested wetland site
- Not in need of enhancement
- Not much room to expand

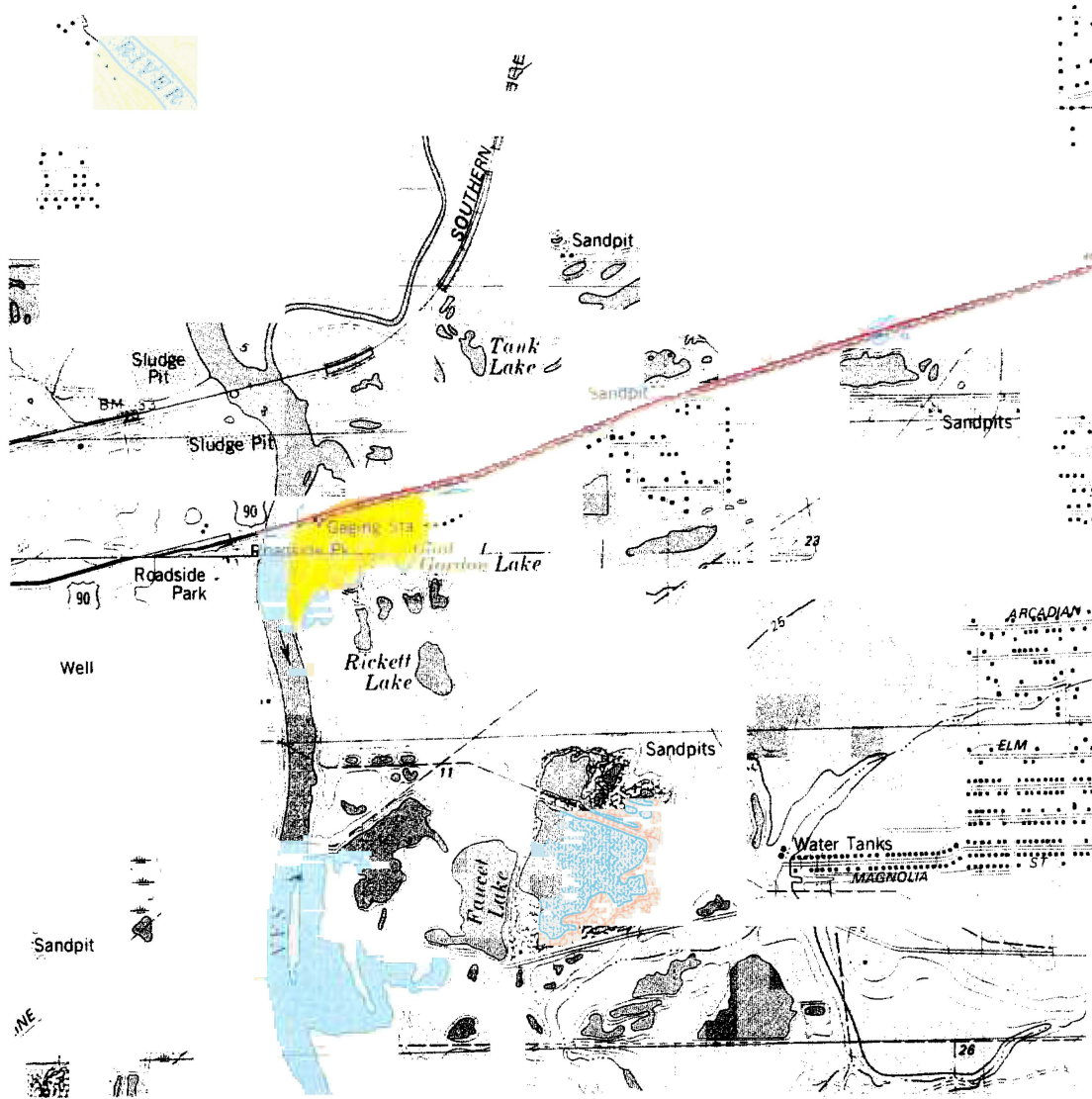
Barrett II Site



Characteristics:

- Poor access by private dirt road
- Existing fresh water wetland
- Could be expanded into adjacent pasture
- Currently well buffered
- Close to Barrett and FL Site
- Would be isolated fresh water w.l.

Barrett I Site



Characteristics:

- Accessible to community of Barrett Station

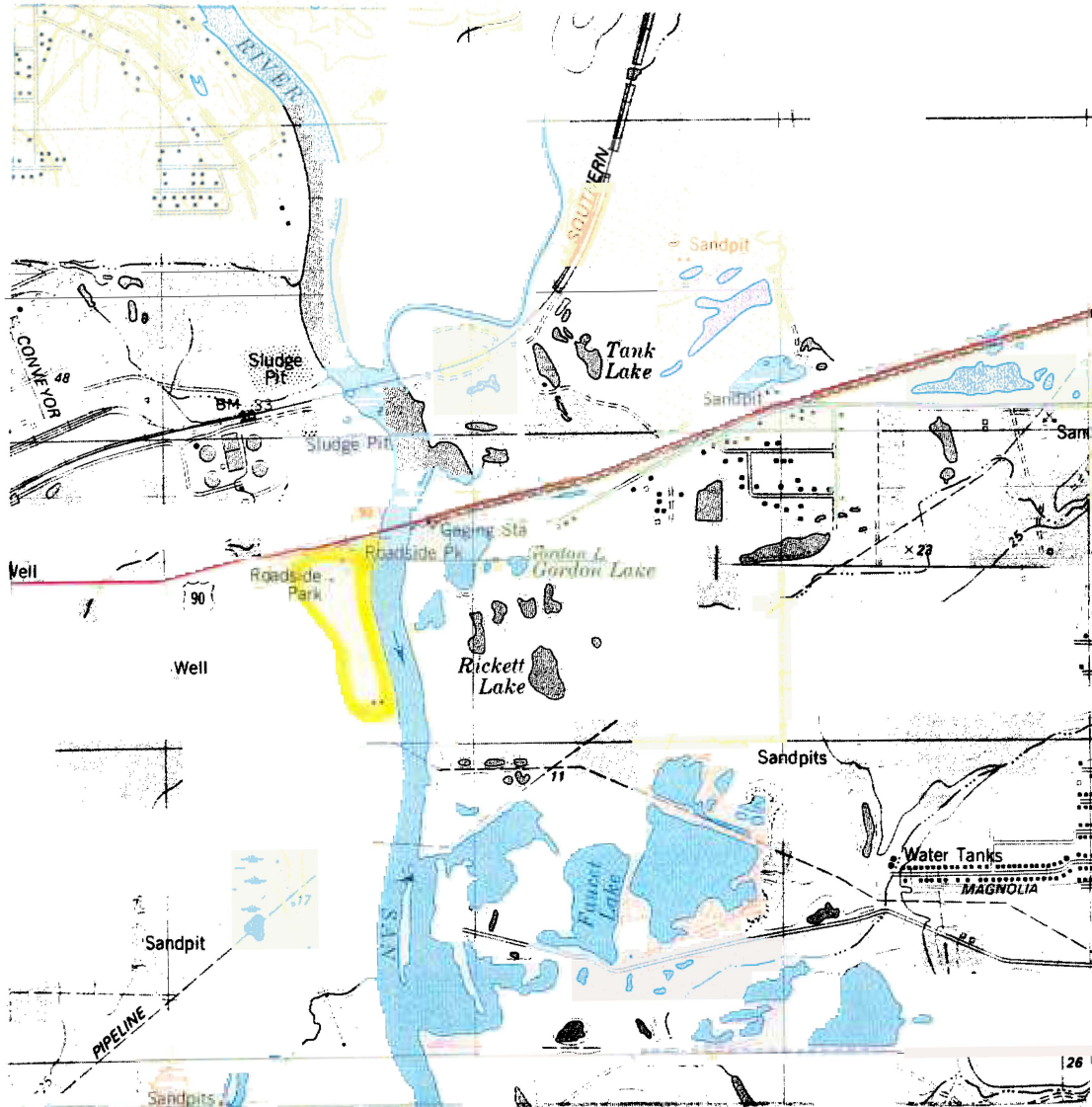
Surrounded by hardwood forest

- Significant excavation required

Areas that could be both enhanced and expanded

Possible to enable community access to river

Old U.S. 90 Park Site

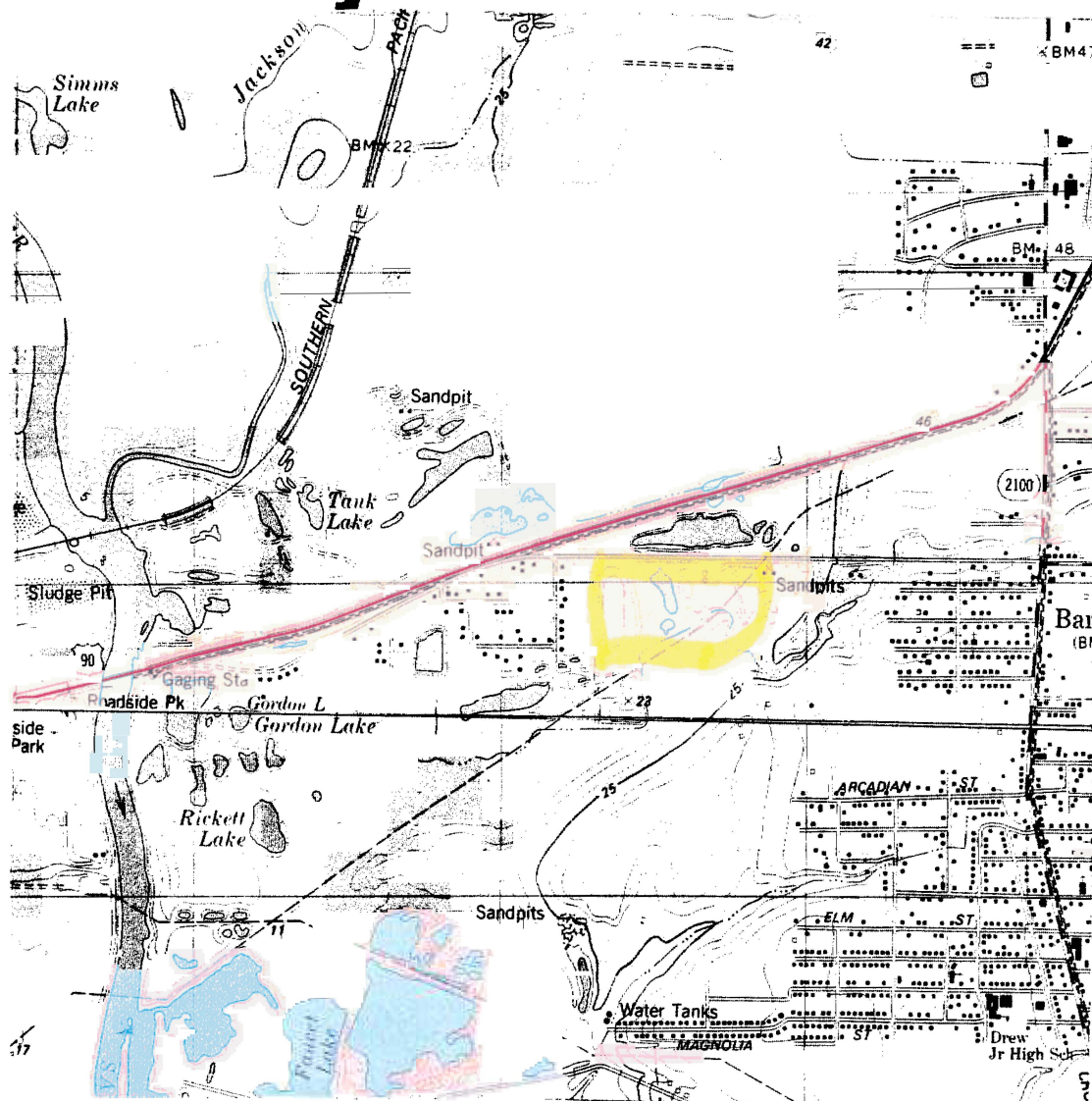


Characteristics:

- Pine-Hardwood forest
- No existing wetland
- Significant excavation required
- Utilized as local dump site
- Not a promising location

French Limited Wetlands Mitigation

Site Adjacent to French Limited



Characteristics:

- Good access
- Existing isolated forested wetland

Potential to enhance or expand

- Adjacent to Superfund site
- Close to Crosby and Barrett Station
- Moderate buffer

French Limited Wetlands Mitigation

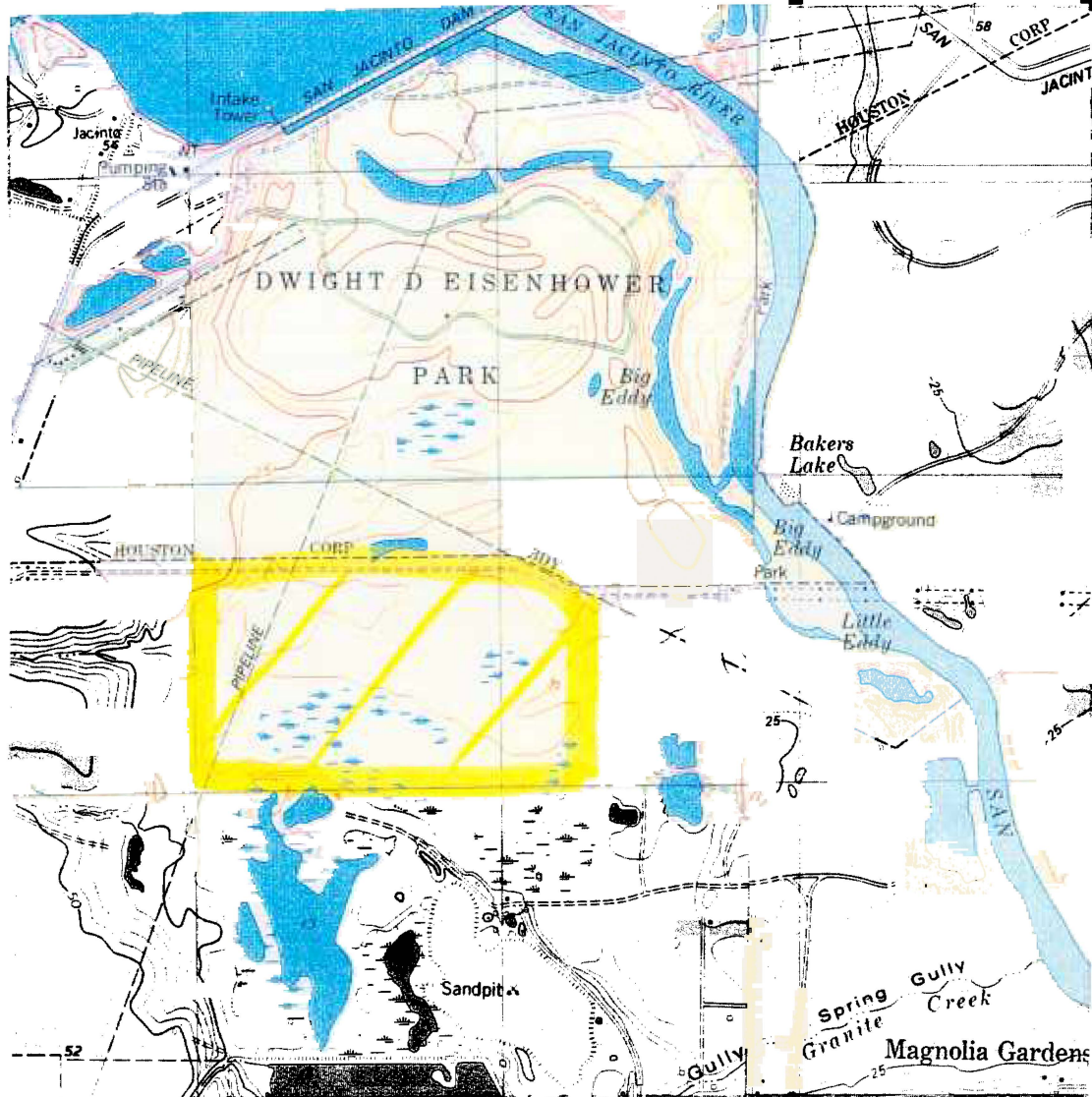
Garrett Road - Specialty Sand



Characteristics:

- **Extremely large area**
- **Existing fresh wetland areas could be easily expanded and/or enhanced**
- **Good buffer**
- **Inaccessible to public**
- **Wetlands would be isolated f.w.**

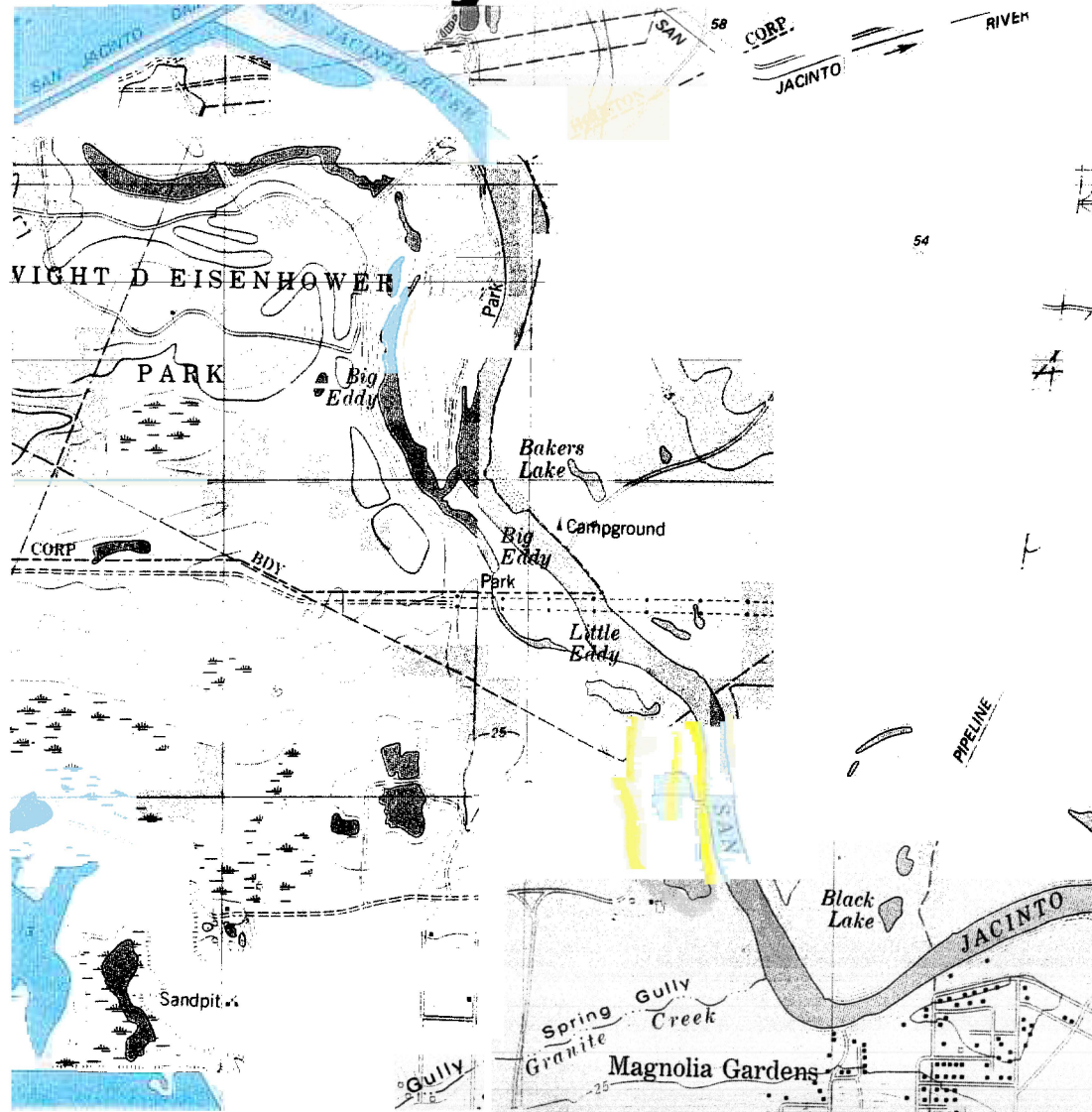
North Pasture - Specialty Sand



Characteristics:

- Accessible by dirt road
- Existing small f.w. wetlands
- Easily expanded into adjacent pasture
- Excellent buffer
- No public access
- Large area

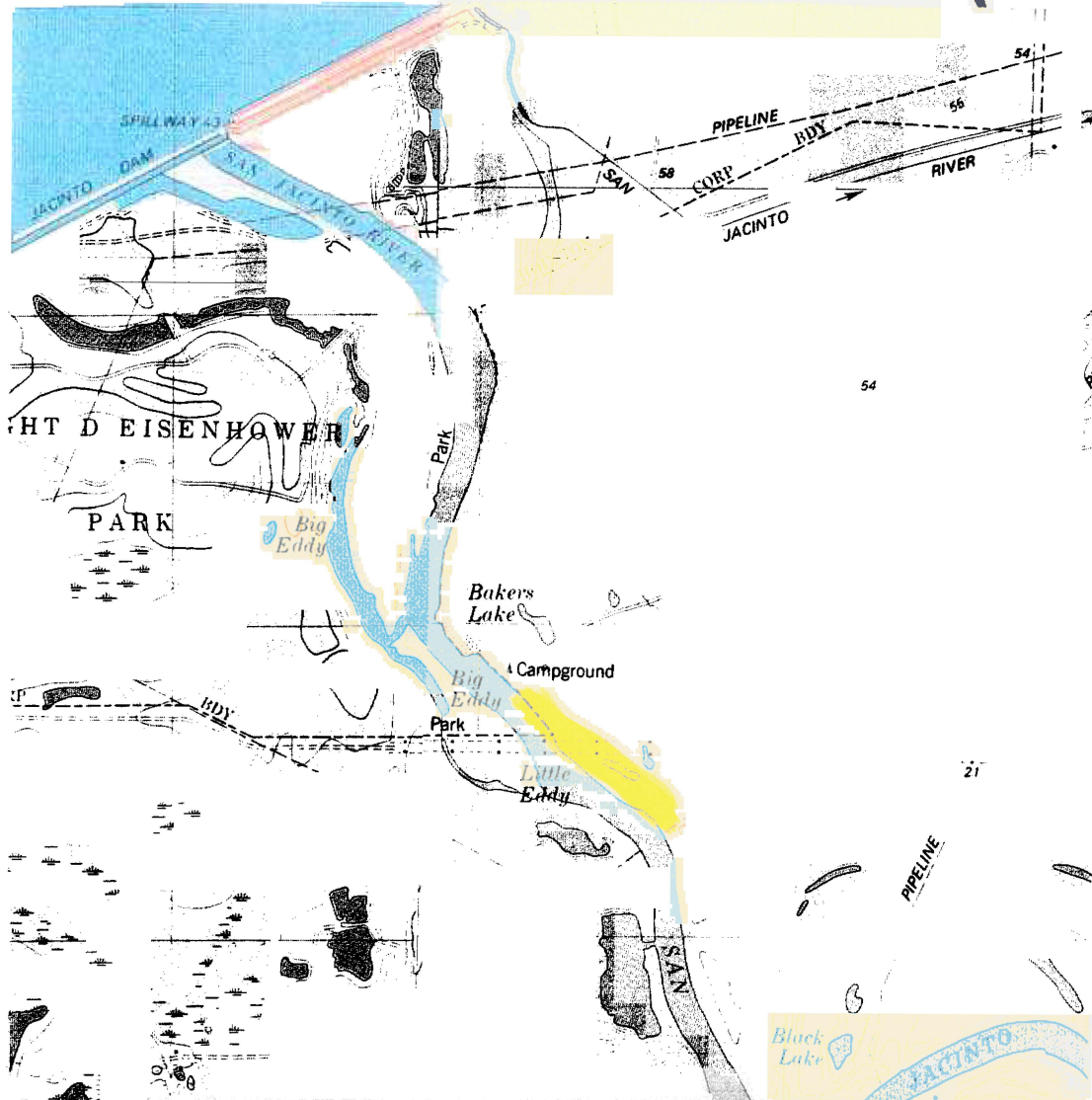
Little Eddy Site



Characteristics:

- Low public access
- Steep grade from pine-hardwood to cypress lake
- Strong enhancement possibility
- Requires significant excavation
- Isolated except during river flooding

South of Baker Lake (Site)

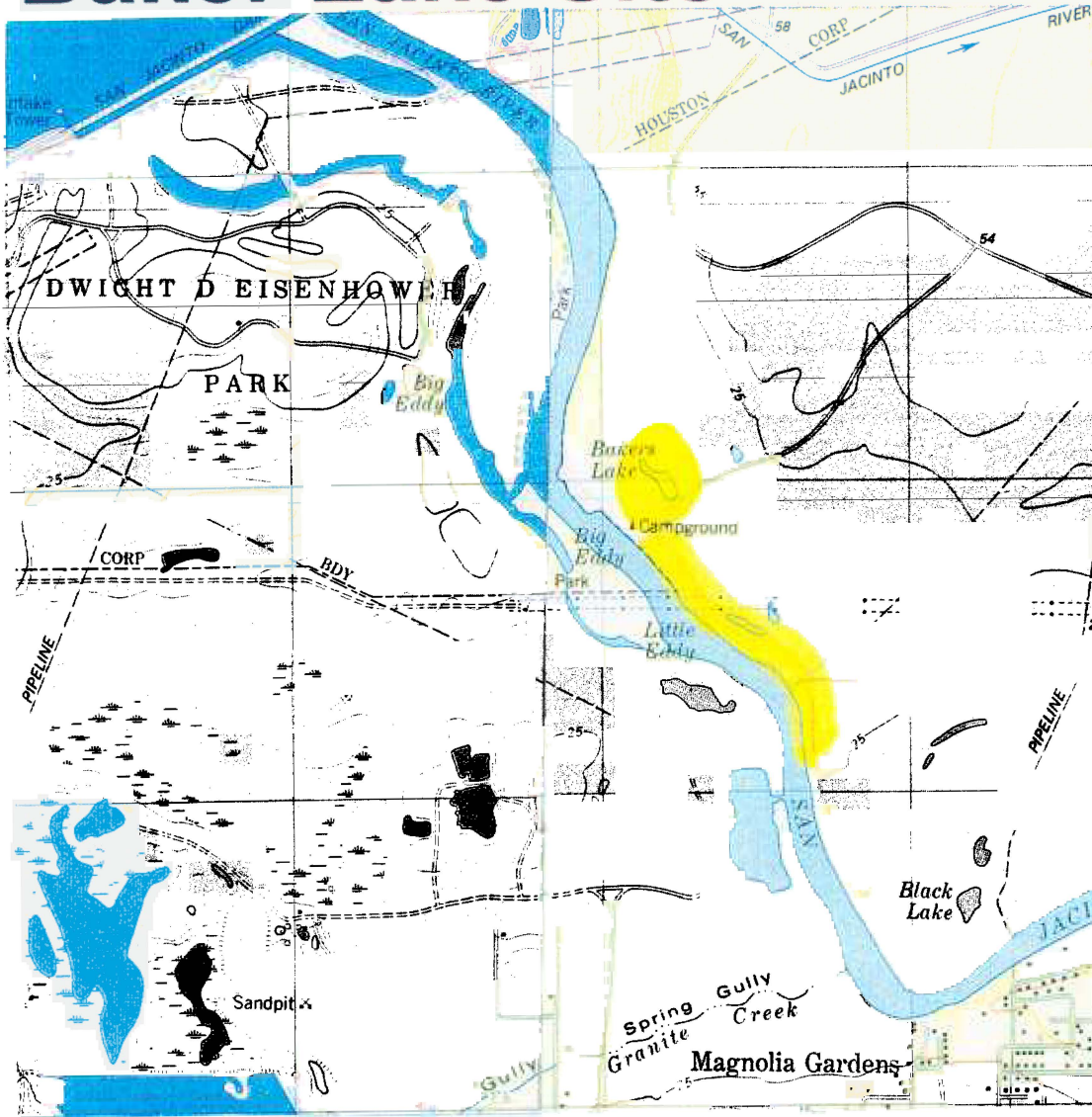


Characteristics:

**Large area
containing many
existing isolated
fresh water
wetlands**

- **Already high
quality**
- **Some
enhancement
already
performed**

Baker Lake Site

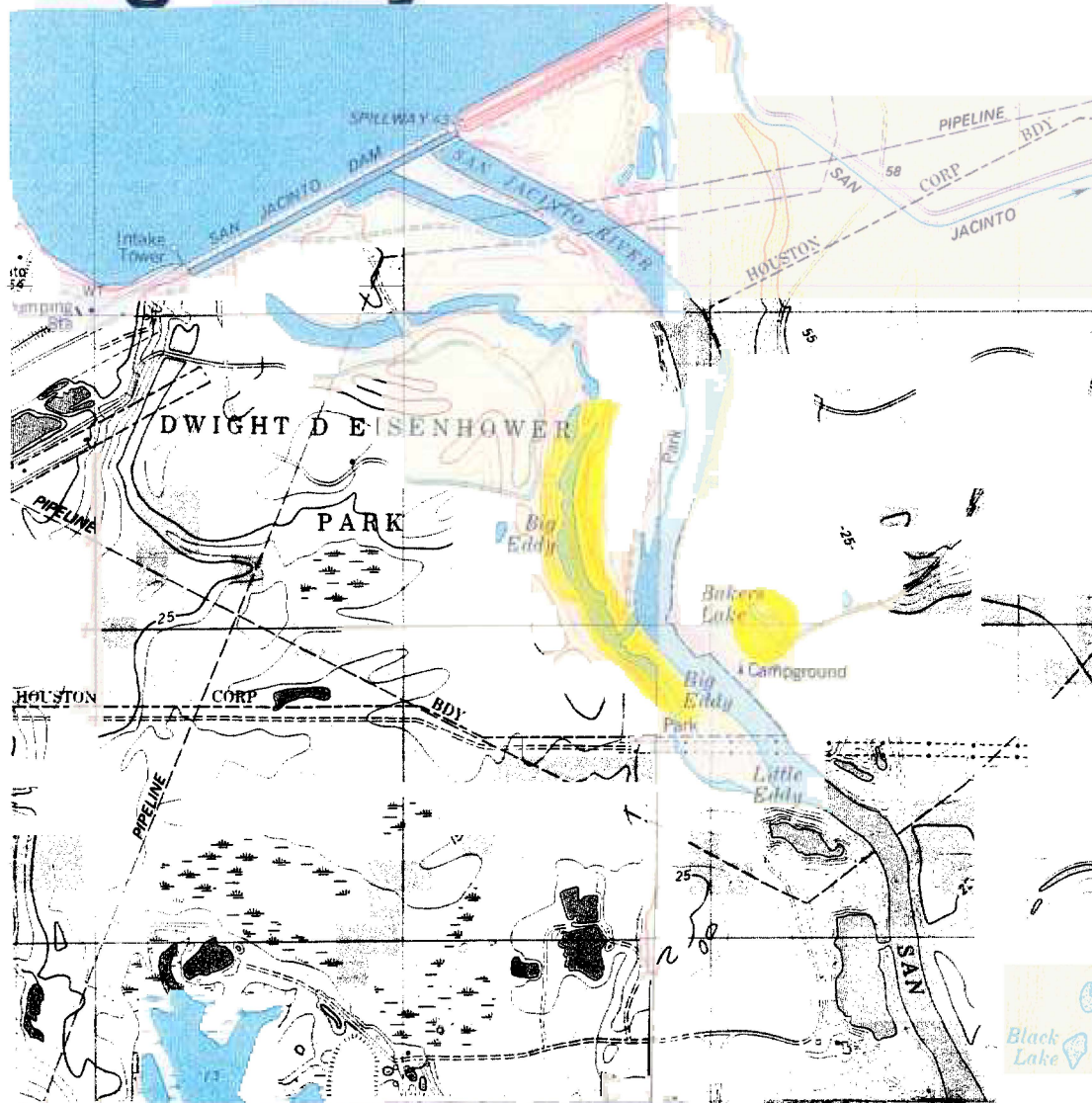


Characteristics:

- Existing hardwood forest and cypress lake
- Easily accessible to public
- Could be expanded into fresh water marsh
- Significant excavation
- Part of Newport residential development

French Limited Wetlands Mitigation

Big Eddy Site



Characteristics:

- Existing high quality cypress lake
- Northern end could be expanded
- Public access by boat from park on Lake Houston
- Noted significant vandalism in adjacent park
- Steep southern shoreline

French Limited Wetlands Mitigation

BOOKMARK

80557

Appendix B

Characteristics and Aerial Photos of 13 Sites

01502467

Spoil Islands

Environmental/ Technical Criteria

- High wave stress
- Easily enhanced
- Dredged spoil
- Estuarine site
- Large site
- No known protected species
- Good buffer zone
- Susceptible to hurricanes
- Location may have poor water quality

Sociological Criteria

- No public access
- Future ownership unknown
- Community acceptance probably low

Political Criteria

- Long distance from French site
- Regulatory acceptance unknown

Economic Criteria

- Construction access difficult
- Land cost unknown
- Potentially high construction cost

0559



San Jacinto Monument Site

Environmental/ Technical Criteria

- Restoration and enhancement of existing wetlands
- Both estuarine and fresh wetlands
- Very compatible land use - excellent buffer
- Some wave stress; susceptible to hurricanes
- Large Site
- Possible dredged spoil
- ROW for CWA Water Line

Sociological Criteria

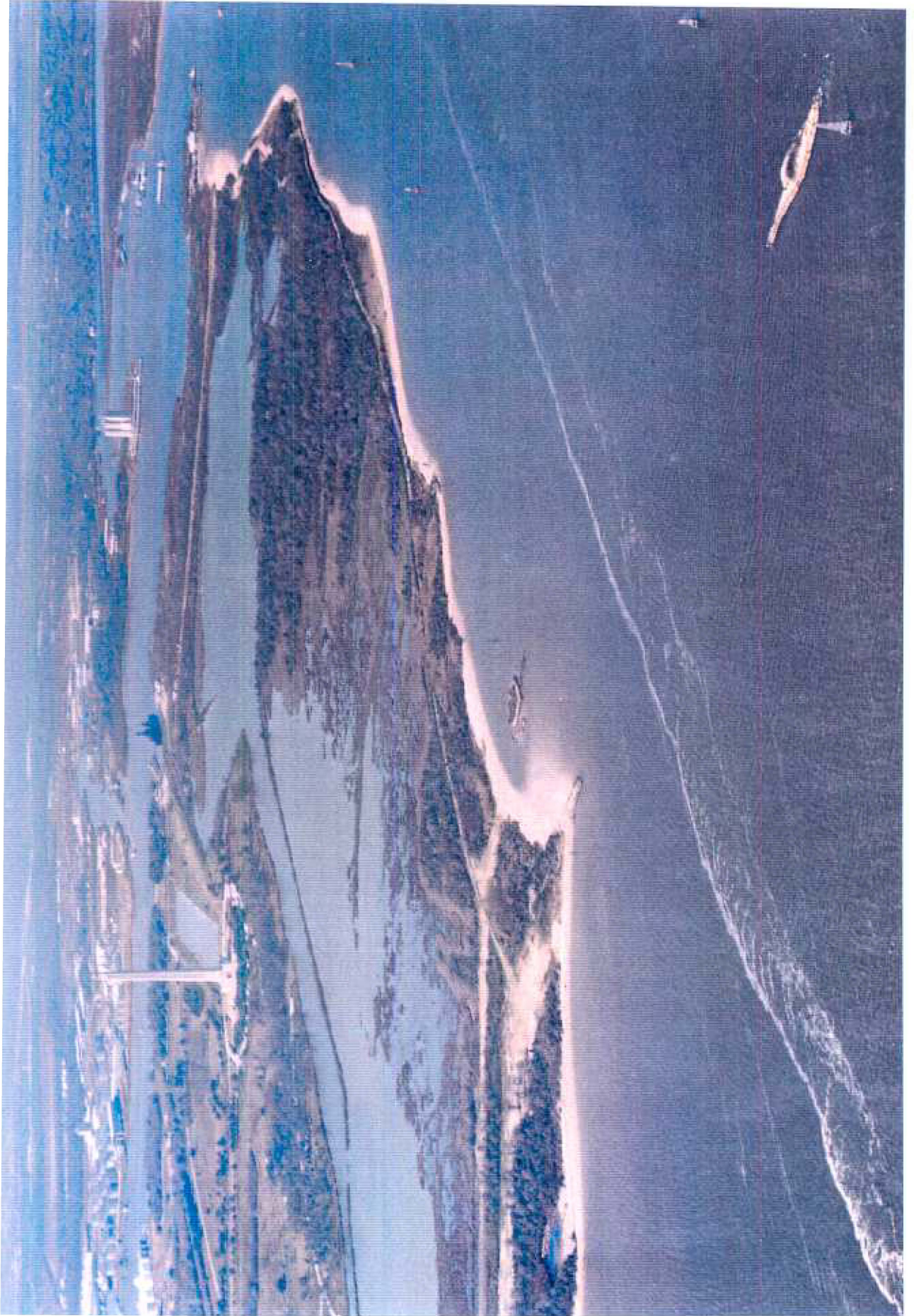
- Good public access
- Excellent aesthetics
- Large number of possible visitors (1 million per year)
- Excellent educational opportunity
- Recreation occurs elsewhere in park
- TPWL will accept - anxious to see wetland restored
- Highly valuable to many Texans
- Historically significant

Political Criteria

- Several miles from French Site
- TPWL will probably accept
- Regulatory acceptance unknown

Economic Criteria

- State-owned land -- no land cost with possible exception of 23 acres
- Concerns regarding time constraints due to involvement of TPWL
- Will involve disposal of some vegetation debris
- Possible to use and grade existing soil



San Jacinto Battlefield Site

Environmental/ Technical Criteria

- Would involve expansion and enhancement of existing f.w. wetland
- Poor buffer
- Surrounding land use heavy industrial
- Large site
- Low potential wave stress

Sociological Criteria

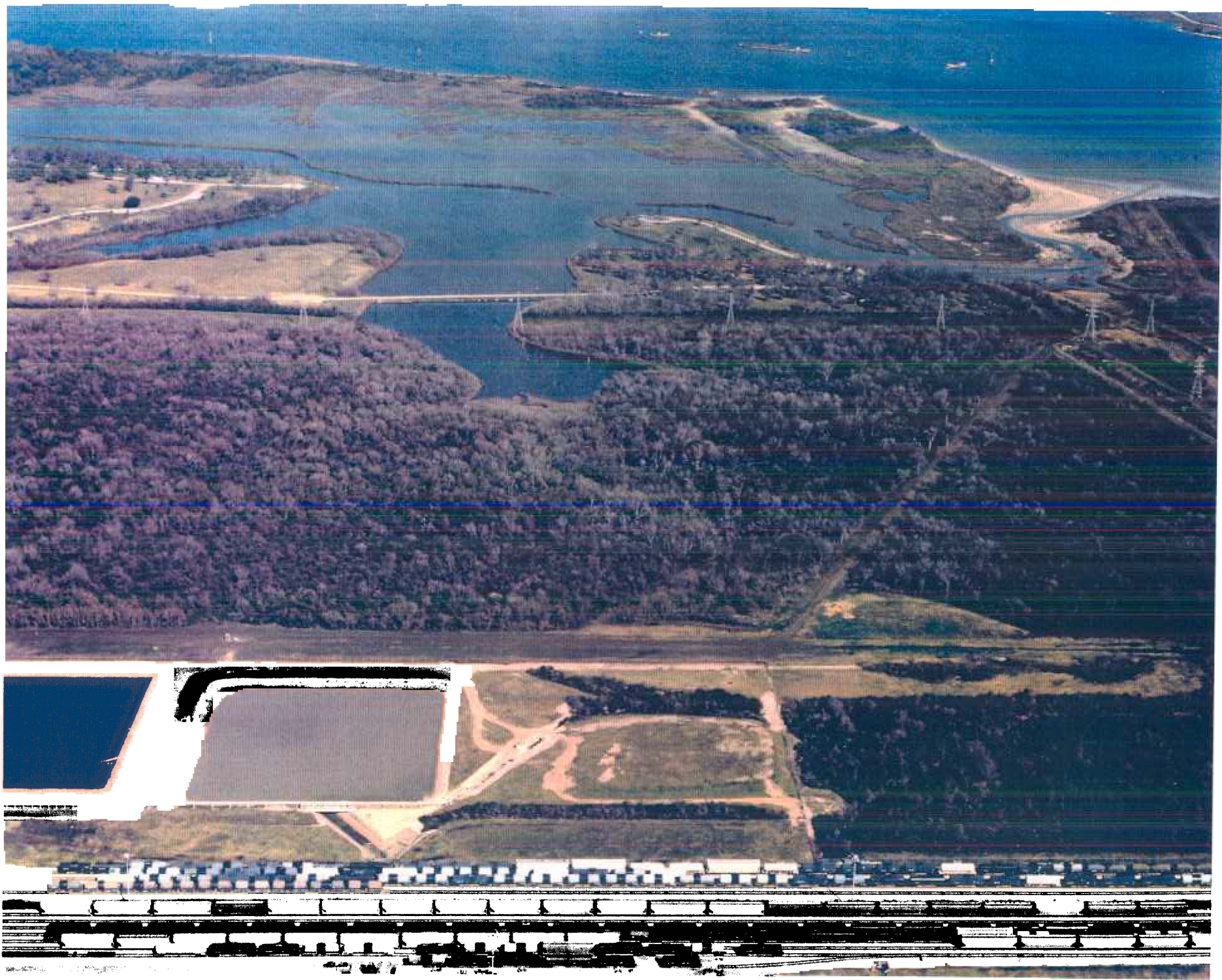
- Easy access by public
- Good aesthetics except for transmission ROW
- Large number of visitors
- Good educational opportunity
- Recreation elsewhere in park
- Could disturb significant historical resources
- Valuable to many Texans

Political Criteria

- Several miles from French Site
- TPWL will probably accept
- Regulatory acceptance unknown

Economic Criteria

- State-Owned Land - no land cost
- Concerns regarding time constraints
- High excavation cost
- Potentially significant disposal of tree debris and soil



80560

Brownwood Site

Environmental/ Technical Criteria

- High wave stress
- Create/enhance both f.w. and estuarine wetlands
- Good buffer now; poor once park developed
- Large site
- Susceptible to hurricanes

Sociological Criteria

- Very poor aesthetics
- Good education and recreation potential
- Potentially high number of visitors
- Good educational opportunity
- City of Baytown would accept ownership
- Local community acceptance

Political Criteria

- Owned by City of Baytown - Park planned
- Several miles from French site
- Regulatory acceptance unknown

Economic Criteria

- Low or no land cost
- Good access

080565



Wallisville Road Site

Environmental/ Technical Criteria

- Existing high quality f.w. wetlands
- Can be enhanced or expanded
- Moderate wave stress
- Good buffer
- Compatible surrounding land use
- Large site

Sociological Criteria

- Moderate public access
- Limited community benefits
- Good aesthetics
- Future ownership unknown

Political Criteria

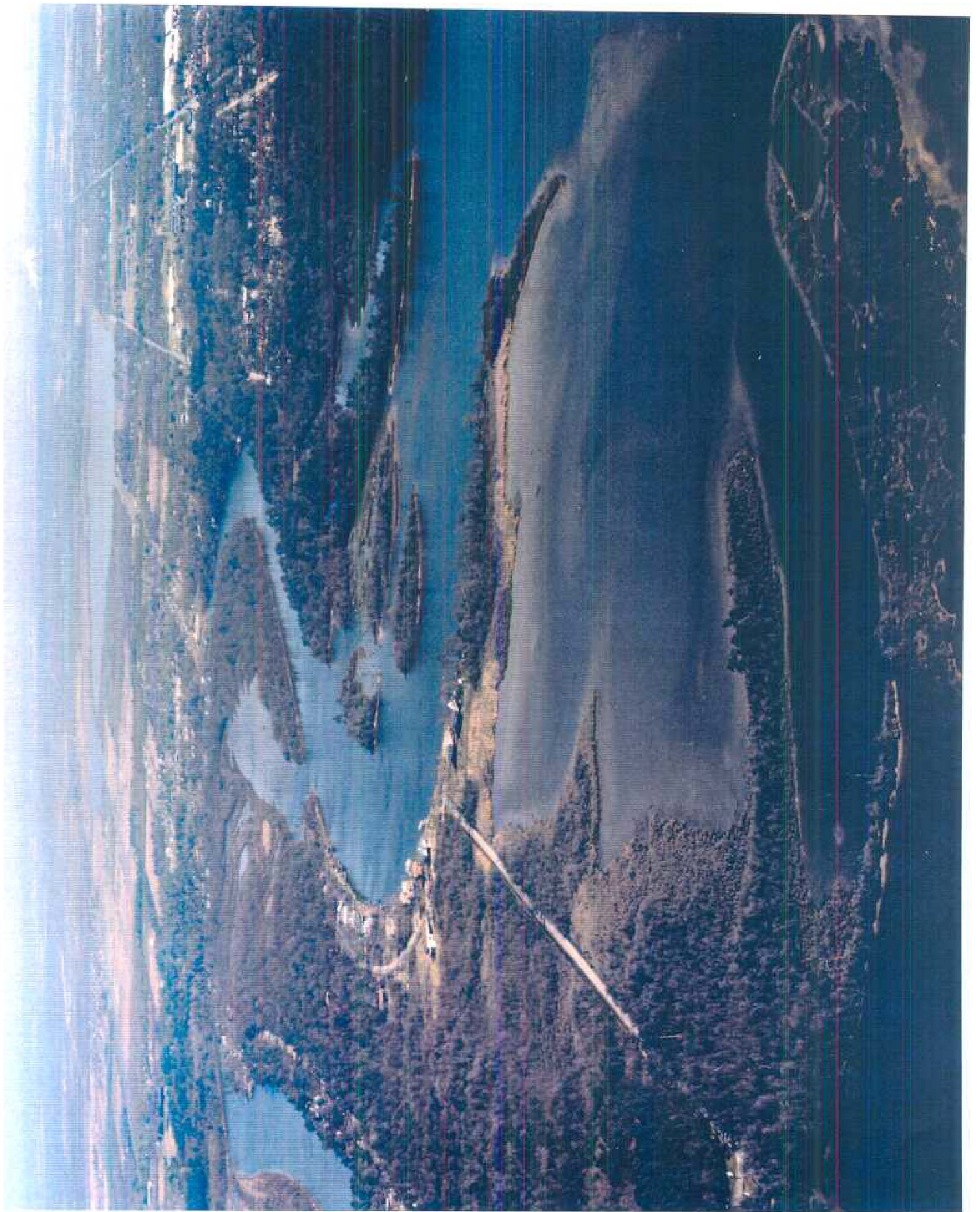
- Regulatory acceptance unknown
- Close to French site

Economic Criteria

- Moderate construction cost
- Land cost and availability unknown

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80567



Rio Villa Park

Environmental/ Technical Criteria

- Existing high quality f.w. marsh and forest
- Good buffer
- Low wave stress
- Can enhance or expand
- Compatible land use
- Large site

Sociological Criteria

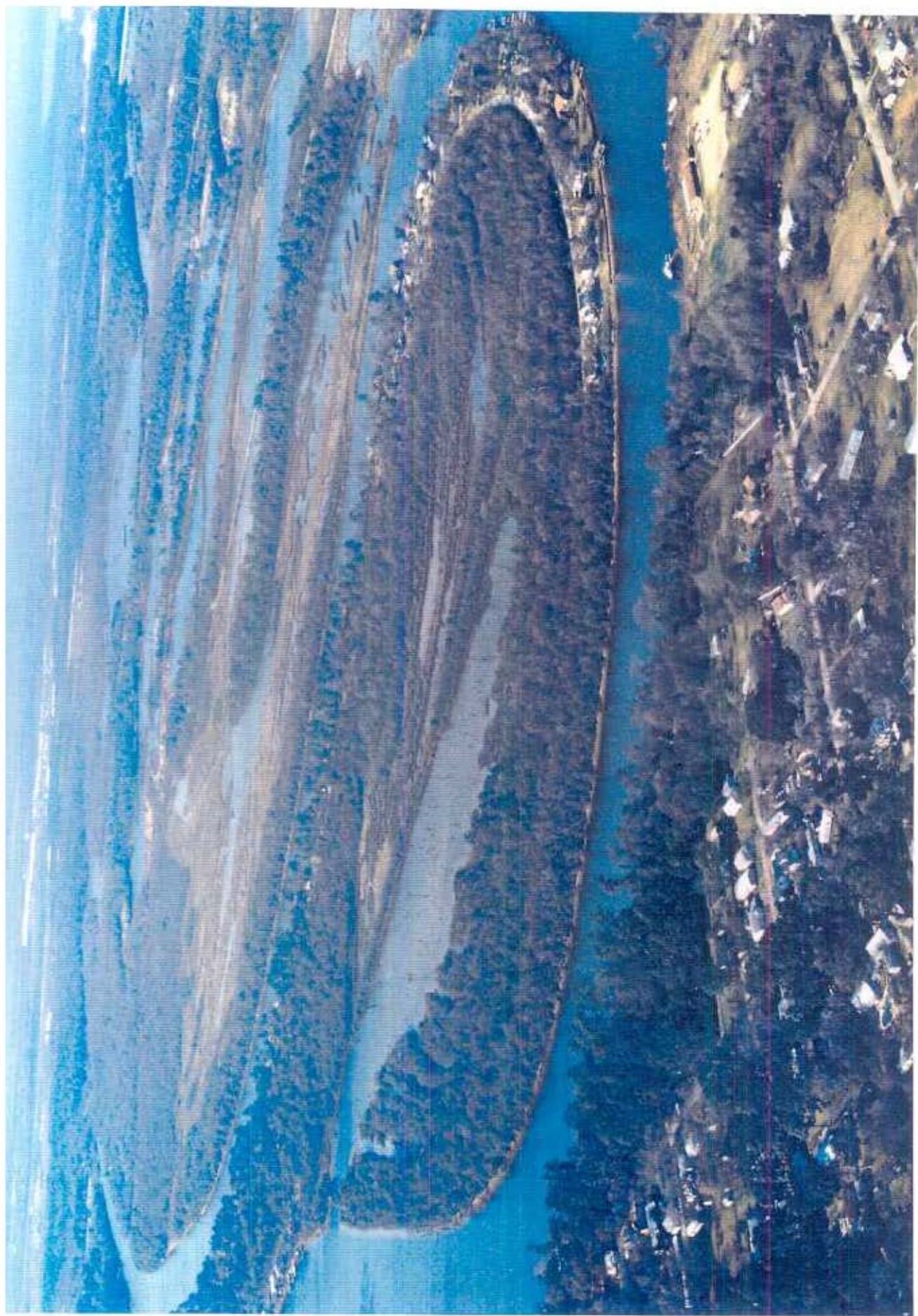
- Limited public access
- Owned by Rio Villa homeowners association
- Benefits could be limited to Rio Villa

Political Criteria

- Close to French site
- Regulatory acceptance unknown

Economic Criteria

- Requires significant excavation
- Significant removal and disposal of tree debris



Highland Shores Site

Environmental/ Technical Criteria

- Existing high quality f.w. marsh and forested wetland
- Good buffer
- Very large area
- Could be enhanced
- Compatible land use

Sociological Criteria

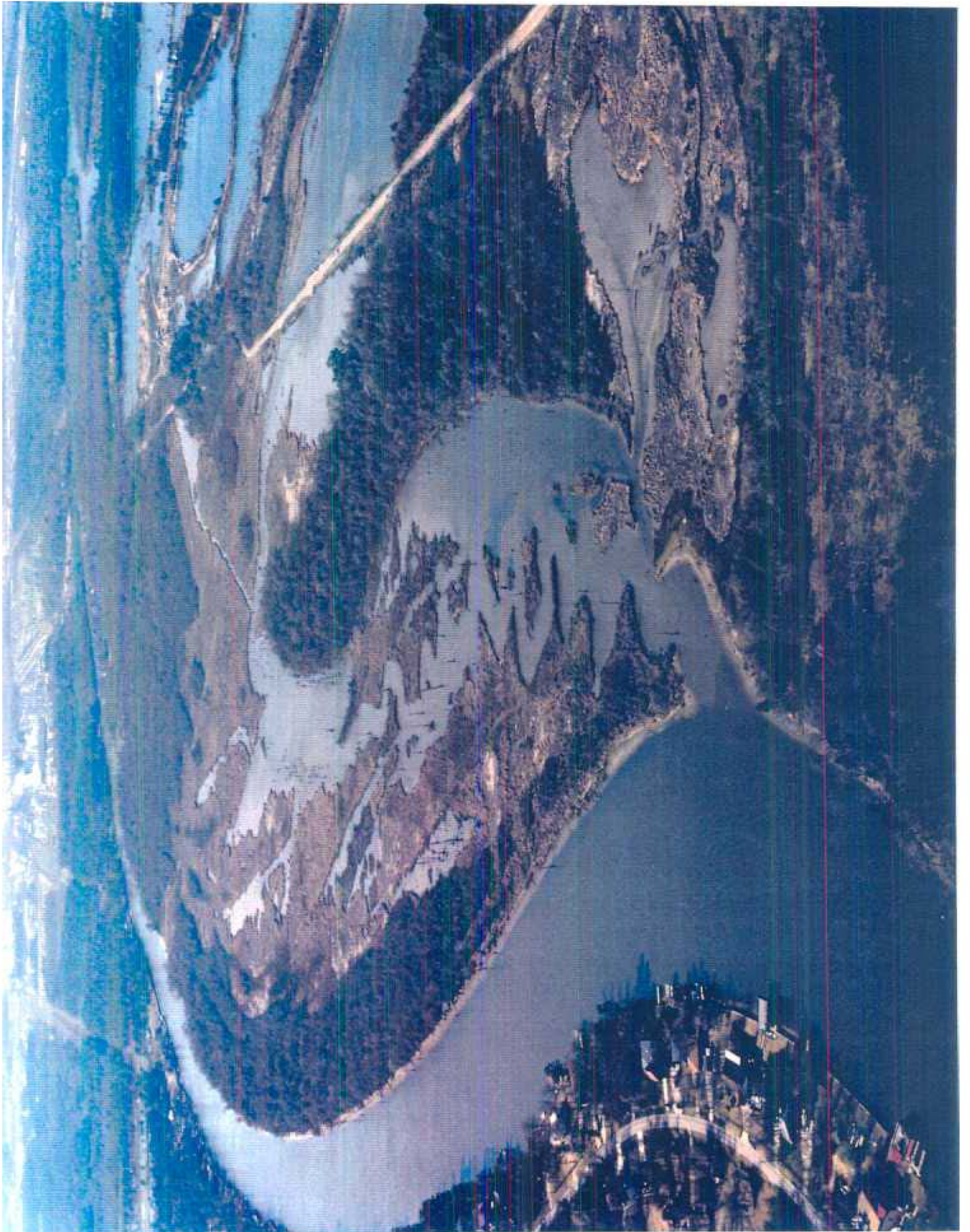
- Moderate access
- Near Highlands
- Future ownership unknown
- Potential for community benefits
- Excellent aesthetics
- Community acceptance probable

Political Criteria

- Regulatory acceptance unknown
- Close to French site
- Already a large, high quality site

Economic Criteria

- Land ownership and acquisition cost unknown
- Low to no excavation
- Low to no disposal



Barrett I Site

Environmental/ Technical Criteria

- Surrounded by hardwood forest
- Fresh water wetlands could be both enhanced and expanded
- Moderate buffer
- Compatible with surrounding land use
- Large site

Sociological Criteria

- Easy public access for Barrett Station
- Possible to enable community access to San Jacinto River
- Good community benefits for Barrett Station -- both recreational and educational
- Good aesthetics
- Barrett Station probably willing to own

Political Criteria

- Regulatory acceptance unknown
- Very close to French site

Economic Criteria

- Significant excavation required
- Road upgrade required
- Land ownership and cost unknown
- Moderate tree debris and soil disposal cost

80573



Barrett II Site

Environmental/ Technical Criteria

- Existing f.w. wetland
- Could be expanded into pasture
- Well buffered
- Would be an isolated f.w. wetland
- Compatible land use - pasture and sand pits
- Large site

Sociological Criteria

- Poor public access
- Aesthetics impacted by nearby sand pits
- Moderate community benefits due to access
- Future ownership unknown

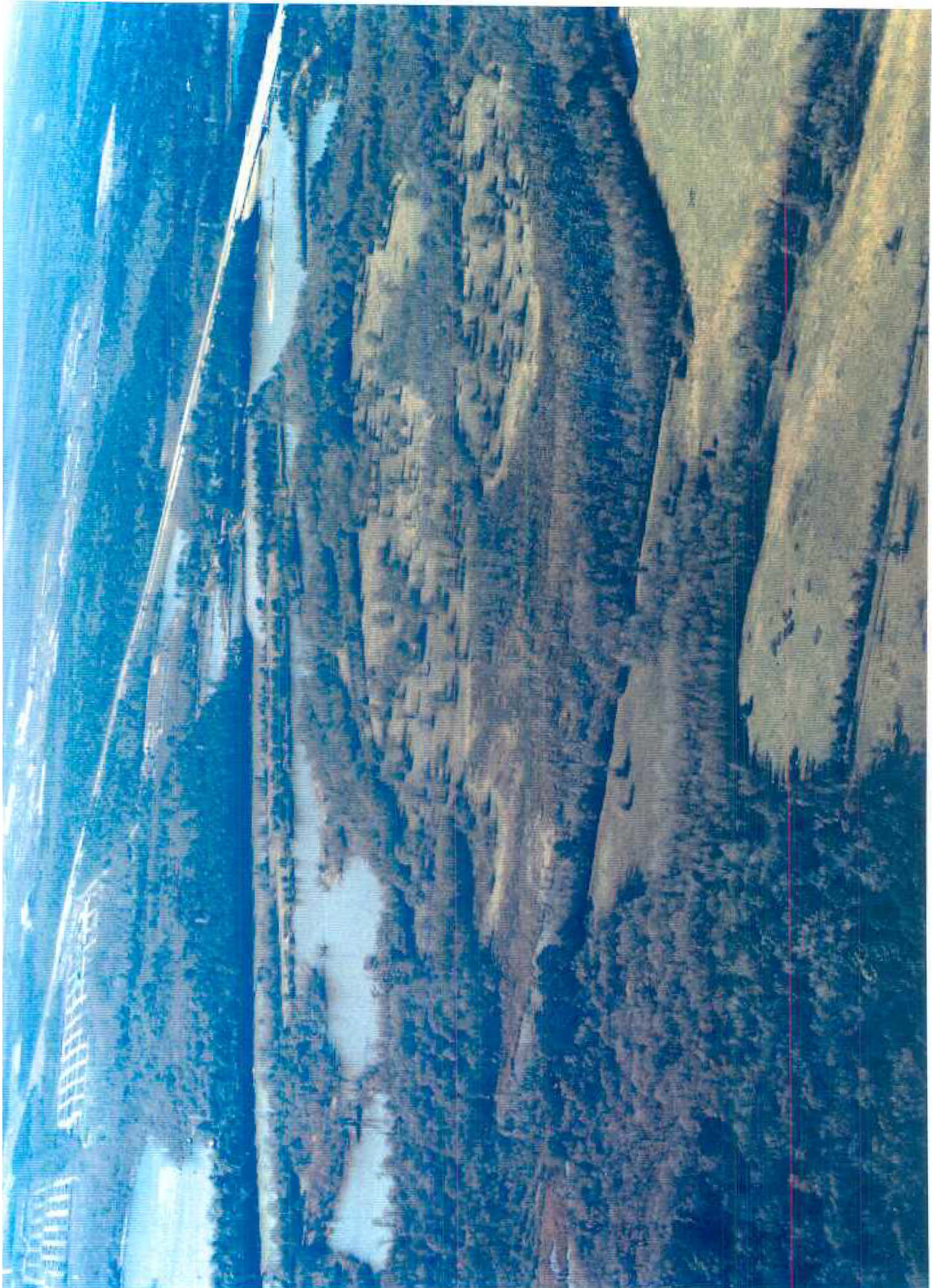
Political Criteria

- Close to Barrett Station and French site
- Regulatory acceptance unknown

Economic Criteria

- Land cost unknown
- Moderate excavation cost
- Soil disposal cost if expanded

80575



Site Adjacent to French Limited

Environmental/ Technical Criteria

- Existing isolated f.w. forested wetland
- Can be enhanced or expanded
- Moderate buffer
- Medium sized-site

Sociological Criteria

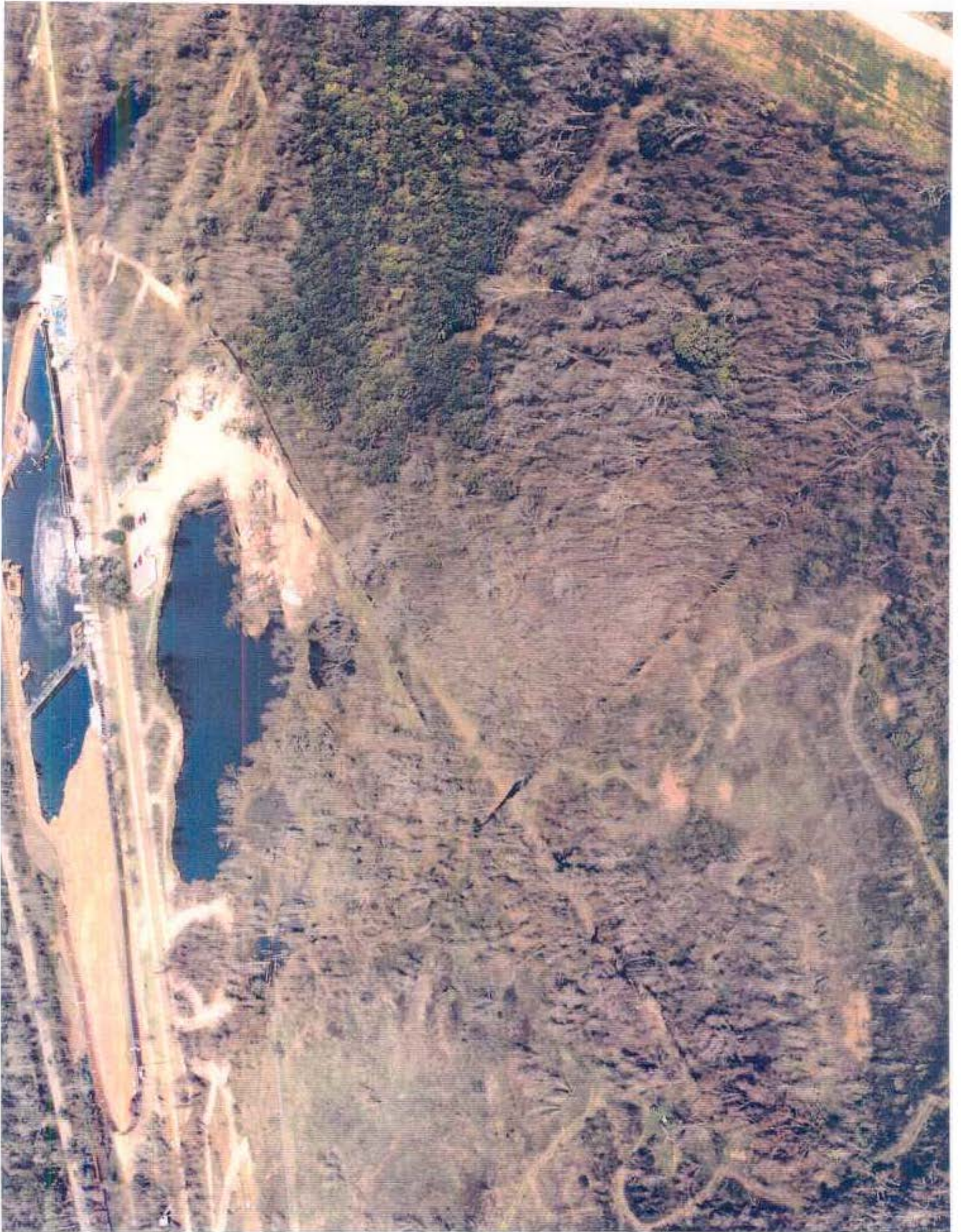
- Easy public access
- Adjacent to Superfund site
- Close to Crosby and Barrett Station
- Good local community benefit potential
- Poor aesthetics
- High probability of acceptance by Crosby and Barrett Station
- Future ownership unknown

Political Criteria

- At French site
- Regulatory acceptance unknown

Economic Criteria

- Good construction access
- Possible high land cost
- High construction cost due to excavation and tree removal
- Potentially high tree debris and soil disposal cost



North Pasture - Specialty Sand

Environmental/ Technical Criteria

- Existing small f.w. wetlands
- Easily expanded into adjacent pasture
- Excellent buffer
- Large site
- Would be isolated f.w. wetland
- Commercial sand pits surround site

Sociological Criteria

- Poor public access
- Low potential for community benefits
- Good aesthetics
- Future site ownership unknown

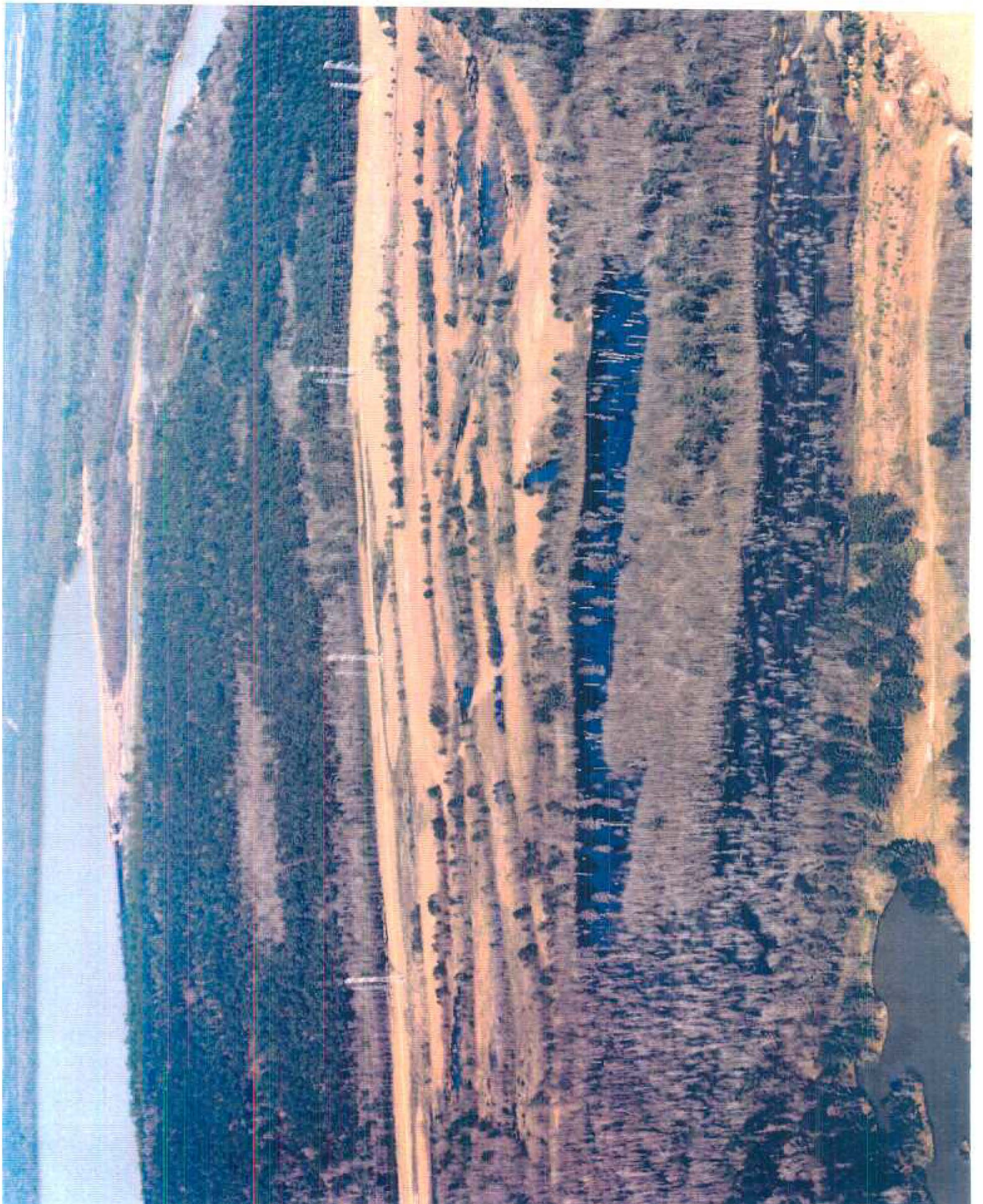
Political Criteria

- Regulatory acceptance unknown
- Close to French site

Economic Criteria

- Unknown land acquisition cost
- Potentially significant excavation
- Moderate cost of tree debris and soil disposal

87579



Garrett Road - Specialty Sand

Environmental/ Technical Criteria

- Existing isolated f.w. wetland areas
- Easily expanded and enhanced
- Good buffer
- Very large site
- Surrounded by commercial sand pits

Sociological Criteria

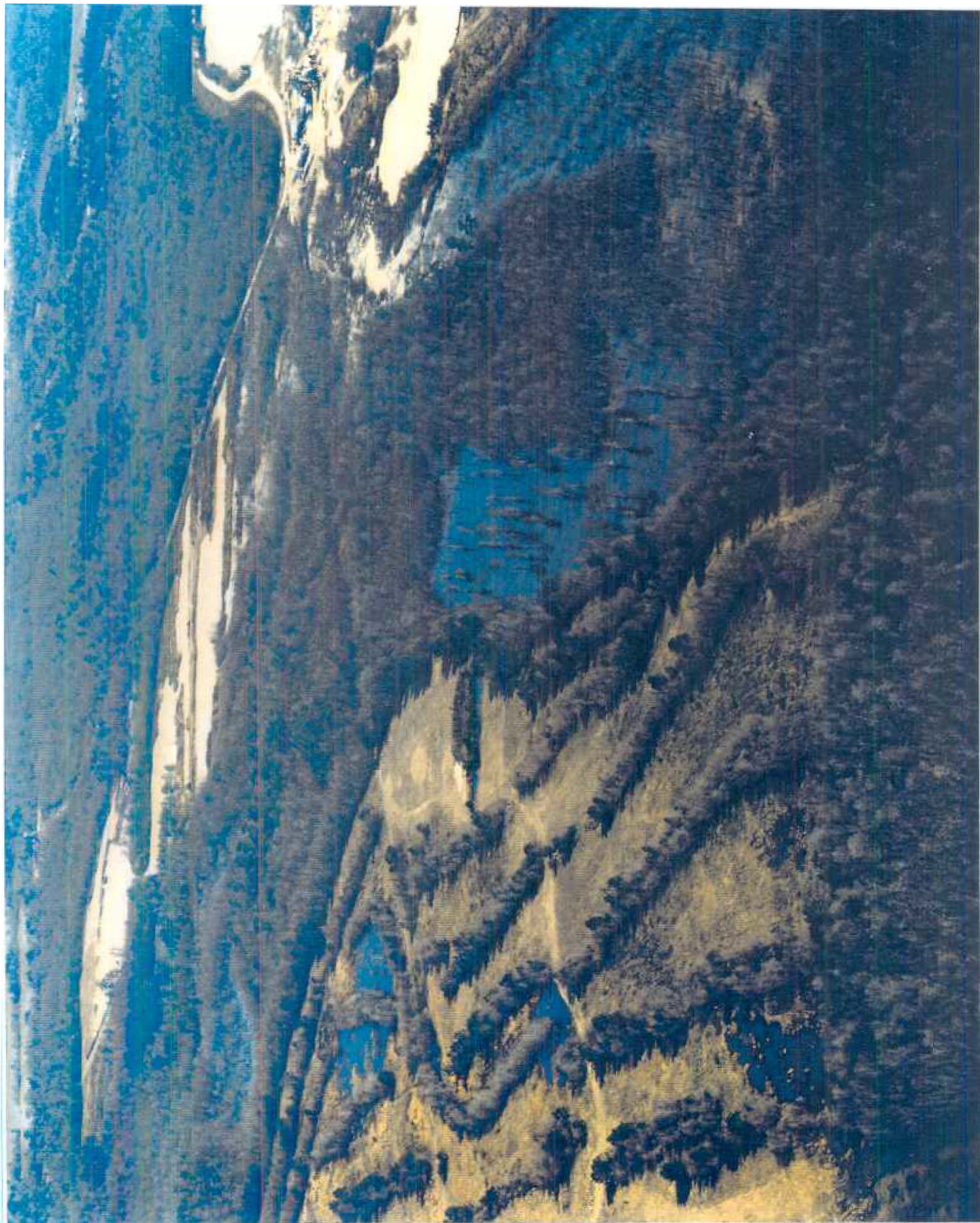
- Poor public access
- Aesthetics impacted by adjacent commercial sand pits
- Very limited potential for public benefits
- Community acceptance unknown
- Future site ownership unknown

Political Criteria

- Regulatory acceptance unknown
- Close to French site

Economic Criteria

- Unknown land acquisition cost
- Moderate excavation cost
- Potentially high disposal cost for tree debris and soils



Little Eddy Site

Environmental/ Technical Criteria

- Existing isolated f.w. forested wetland
- Steep elevational grades
- Strong enhancement and expansion possibilities
- Compatible land use
- Commercial sand pit nearby
- Large site
- Well buffered

Sociological Criteria

- Poor public access
- Benefits to community limited
- Good aesthetics
- Future site ownership unknown
- Probable community acceptance

Political Criteria

- Close to French site
- Regulatory acceptance unknown

Economic Criteria

- Requires significant excavation - high cost
- Land ownership and cost unknown
- Potentially high disposal cost of tree debris and soil



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Appendix C

Historic Aerial Photos and Conceptual Designs for Four Sites

1953 Conditions : Context Map

Barrett I
Site

French Limited
Wellness Management Project

Coast Development
Wellness Management Project



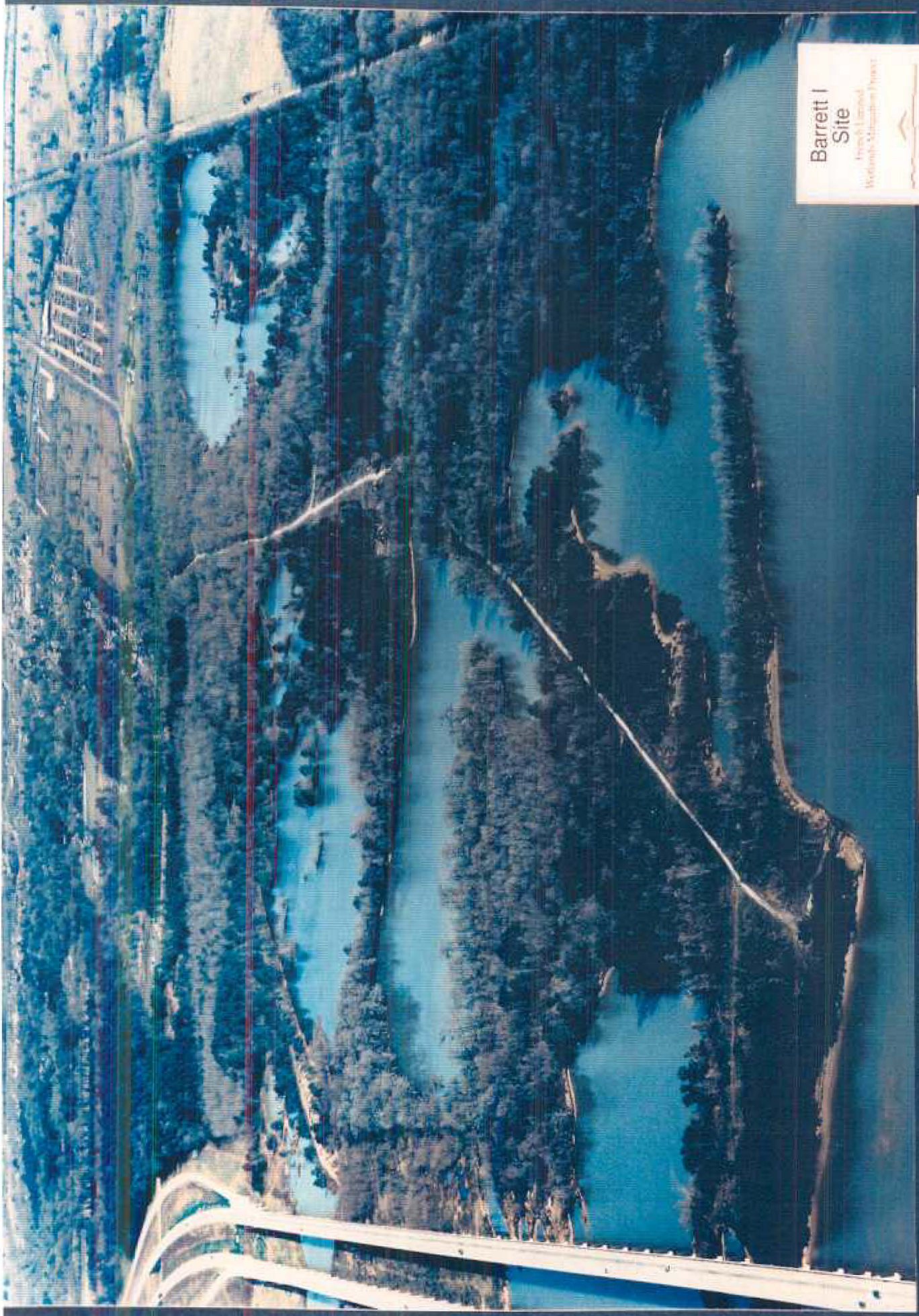


Barrett I
Site

French Island
Wetlands Management Project

David L. Barrett & Associates
10000 Highway 100, Suite 100
Houston, Texas 77055

Site Concepts : Aerial View



Barrett I
Site
French Lizard
Wetlands Mitigation Project
Crest Management Group
Environmental Services Division

Site Concepts : Aerial View



Wallisville
Road Site
French Limited
Wetlands Mitigation Project

Crunch Environmental Services
The P&A Group, Landscape Architecture
27 February 2006

1953 Conditions : Context Map

000000



Wallisville
Boad Site

French Limited
Wetlands Mitigation Project

Site Concepts : Aerial View

© French Environmental Services
10000 10th Avenue
10/10/2000

805310



Wallisville Road Site

French Limited
Wetlands Mitigation Project



Site Concepts : Aerial View

80591



Brownwood Site
French Limited
Wetlands Mitigation Project

Consulting Geomorphological Services
For the City of Vancouver
© 2004/05

1953 Conditions : Context Map



**Brownwood
Site**
Ferry's Landing
Wetlands Mitigation Project

Graphic: Brownwood Site Services
The Wetland Mitigation Project
20 January 2004

Site Concepts : Aerial View



Brownwood Site
French Limited
Wetlands Mitigation Project
Circled Environmental Services
10000 10th Avenue, Suite 100
Calgary, Alberta T2C 1A5
Canada

Site Concepts : Aerial View



1953 Conditions : Context Map

**San Jacinto
Monument Site**
French Limited
Wetlands Mitigation Project





San Jacinto
Monument Site
French Island
Wildlife Management Project
Coastal Habitat Management Service
The U.S. Fish and Wildlife Service
Bureau of Land Management
U.S. Department of the Interior

Site Concepts : Aerial View



Site Concepts : Aerial View

San Jacinto
Monument Site
French Limited
Wetlands Mitigation Project


Crescent Environmental Services
The Wetlands Mitigation Project
27 January 1994

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Appendix D

Cultural Resource Report -- Two Candidate Sites

01502469

EMANCO Inc.*Environmental Management and Consulting Services**Arless D. Ray, Ph.D.
William P. Wenstrom, Ph.D.*

March 14, 1994

Mr. Greg Crouch
Crouch Environmental Services
12115 Wessex
Houston, TX 77089

TRANSMITTED VIA FAX

Subject: French, Ltd. Wetlands Mitigation Project

Dear Greg:

We completed our preliminary cultural resource investigation of subject project yesterday. The study began about 8 March 1994 under the direction of Carol S. Weed and Dr. Orloff G. Miller. We did this work pursuant to provisions of Texas Historical Commission (THC) Department of Antiquities Protection Permit No. 1374.

We understand that you are now finishing a feasibility study that will result in selecting one of two alternate locations for the wetland restoration or enhancement. The potential wetland mitigation locations are referred to as the Brownwood Subdivision and Monument Marsh sites, both in Harris County, Texas.

The purpose of our cultural resource study was to acquire sufficient information to recommend one or the other of the two locations that would have the least impact on significant cultural resources. The background and field investigations were designed to accomplish three goals: 1) to assess the current condition of previously reported cultural resources; 2) to identify previously unreported cultural resources; and 3) to identify intact land forms which might have hosted prehistoric or historic occupations. The results of our investigation are summarized below by location.

BROWNWOOD SUBDIVISION

Brownwood Subdivision is in Baytown, Texas. It is on the southwestern end of the so-called "Brownwood" or "Wooster" peninsula which is bounded on the west by Crystal Bay and on the south by Scott Bay. Both are extensions of the San Jacinto River (Houston Ship Channel). As currently planned, the proposed wetland project will primarily affect the shoreline west and south of Mapleton Street and west of Bayshore Drive, and the interior of the peninsula between Mapleton Street on the east and south, Crow Street on the north, and Bayshore Drive on the west.

Mr. Greg Crouch
14 March 1994
Page 2

Four types of previously reported or suspected cultural resources occur at Brownwood. They are: 1) previously reported prehistoric Rangia shell middens; 2) an historic cemetery associated with residential occupation of the land by the Wooster family; 3) structural remains associated with residential occupation of the land by the Brown and Wooster families in the early 20th century; and 4) remnants of the now-destroyed and partially inundated Brownwood Subdivision, abandoned in 1983. The previously reported shell middens occur south of Mapleton Street and west of Bayshore Drive.

Examination of historic maps and aerial photographs indicates that the shoreline configuration of the peninsula has undergone significant alteration over the last 40 years. Nonetheless, shell midden remnants which correspond in location to previously reported sites persist. Most of these remnants are confined to the near shoreline, but at least two extend inland for distances ranging from three to seven meters. We also found shell midden pockets during shoreline reconnaissance which were not previously listed in the state site file. Subsurface exploration of these remains using a split-spoon soil sampler and excavation of a 50cmX50cm test unit revealed undisturbed lenses of intact shell midden that produced Goose Creek plain and incised ceramics, chipped stone debitage, and burned shell fragments.

The Wooster Cemetery site is inundated and no remains of the cemetery are observable at low tide. We interviewed (b) (6) on 9 March 1994. (b) (6) whose family owned the cemetery, stated that the cemetery contained "about 10 graves" all but two of which remain in the cemetery. With one exception, all the graves belong to members of the Wooster family. The earliest burial in the cemetery is of an unknown person. The first Wooster use of the cemetery occurred in 1894 and the last internment was in 1962.

According to (b) (6) family members relocated two grave markers in addition to the markers and remains of two additional graves in 1983. The other graves were not disinterred because they were then considered to be in such an advanced state of decay as to render removal impossible.

Walk-over survey and limited shovel testing in the interior of the subdivision indicates that the surface topography also has been significantly altered from that shown on various maps. However, two small natural ridges remain on either side of Linwood Street. Examination of these ridges revealed no cultural material other than recent historic trash on the surface and in subsurface context.

Similarly, we were unable to identify any of the structural remains associated with early 20th century habitation of the area with the possible exception of a partially drowned foundation. We were unable to further assess this location because of the depth of the standing water.

Mr. Greg Crouch
14 March 1994
Page 3

MONUMENT MARSH

Monument Marsh is within the Marsh Unit of San Jacinto State Park, site of the Battle of San Jacinto. The site is bounded on the northwest by the Crosby-Lynchburg Road, on the southwest by Santa Anna Bayou, and on the northeast and southeast by the San Jacinto River (Houston Ship Channel). Santa Anna Bayou is a natural boundary between the marsh and the actual battlefield.

Like the Brownwood Subdivision, prehistoric and historic period cultural resource sites are reported to occur at Monument Marsh. They are located on the San Jacinto River side of the site, and along the southwestern shore of Santa Anna Bayou.

Mr. Ted Hollingsworth of the Texas Parks and Wildlife Department also stated that he found four other locations along the San Jacinto River that contain cultural material. They are two historic trash dumps, a shell midden lacking stone or lithic artifacts, and a shell midden with lithics, ceramics, burned bone and burned shell. In addition, proximity of the marsh to the historic battlefield suggests an undetermined possibility of encountering the unmarked graves of some 600 Mexican dead who died during the battle. Historic era maps and aerial photographs also indicated a house site within the area.

Unlike Brownwood, Monument Marsh has undergone severe surface alteration from dredge spoil deposition. In addition, shoreline erosion and inundation along the San Jacinto River and Santa Anna Bayou caused by land subsidence is extensive. The extent of dredge spoil dumping and shoreline alteration is well documented on a series of historic maps and aerial photographs which date as early as the 1920s.

Our field investigation at Monument Marsh included walk-over survey, shoreline reconnaissance, and subsurface testing to explore the extent of dredge spoil deposition. We found all the previously reported locations along the shore to have been severely impacted by erosion and land subsidence. Although we observed pockets of shell on the battleground side of Santa Anna Bayou, the landward extent of these concentrations and their origin remains undetermined.

At this stage of the project, we did not seek permission to excavate within the battleground portion of the park because the actual location of any interpretative facilities to be constructed there is speculative. It was apparent, however, that each of the previously reported cultural sites is partially inundated, eroded to some extent, and has also been previously disturbed by landscaping and other surface disturbance during maintenance of the park grounds.

From one to ten feet of dredge spoil covers most of the Marsh Unit. However, we found two small areas north and south of the so-called "Freshwater Pond" where the existing land surface consists of stratified

Mr. Greg Crouch
14 March 1994
Page 4

beach or deflated dune sand. However, we observed no former "A" horizons or other developed living surfaces in the soil profiles at these locations.

Remnants of the former house site include a poured concrete slab, a possible septic tank, and foundation pilings. A family cemetery possibly associated with the house is well outside the project area.

CONCLUSIONS

Our investigation of the Brownwood and Monument Marsh locations revealed the presence of prehistoric and historic archaeological material at both. In particular, intact shell middens at Brownwood Subdivision retain sufficient integrity to contribute possibly significant archaeological information to the record of prehistoric habitation of the area. In contrast, archaeological sites at Monument Marsh are predominantly destroyed by subsidence and erosion and appear to retain no such integrity. The historic house remnants at both locations and the Wooster Cemetery at Brownwood have been similarly impacted by various natural forces during the historic period. Their degree of integrity is likewise highly suspect.

Based on our investigation, known cultural resources at Monument Marsh are less likely to retain information that would make an important contribution to our understanding of this area's early inhabitants. Accordingly, we now believe that implementation of the wetland project there would be least likely to impact significant cultural resources based on our current understanding of the scope of work involved in the wetland enhancement. However, THC will likely require that we review and further document these locations and other sites within the battleground once the wetland plan is finalized. Similarly, it may be necessary to perform additional systematic subsurface exploration of the exposed natural land surfaces to the north and south of the "Freshwater Pond".

I reiterate that our work was designed to compile sufficient information to assist you in the final selection process. It is not intended to be a substitute for any consultation with THC and/or others that might be required during a typical 106 or similar review.

I am providing this letter by fax in order to get our findings to you as quickly as possible. If you require additional information or a sketch map showing the specific cultural resource sites or other locations discussed herein, please call me.

Sincerely,



William P. Wenstrom, Ph.D.

BOOKMARK

Appendix E

Hydrologic Evaluations - Two Candidate Sites

FRENCH LIMITED PROJECT
WETLAND HYDROLOGY EVALUATION
BROWNWOOD SITE

FINAL REPORT

Prepared for:

FLTG, Incorporated
Crosby, Texas

Prepared by:

APPLIED HYDROLOGY ASSOCIATES, INC.
Denver, Colorado

April, 1994

FRENCH LIMITED PROJECT
WETLAND HYDROLOGY EVALUATION
BROWNWOOD SITE

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APPENDICES

Appendix A Laboratory Analytical Reports

1.0 INTRODUCTION

Applied Hydrology Associates, Inc. (AHA) developed and implemented a scope of work to obtain water, soil and sediment samples and perform hydrologic evaluations for the following potential wetland development site adjacent to the San Jacinto estuary:

The Brownwood Site, a former residential site in Baytown adjacent to Crystal Bay which was condemned and abandoned due to flooding as a result of partial subsidence below sea level.

Field work for this project was performed by G&F Technical Services, Inc. (G&F), and coordinated and supervised by Jim Thomson and Art O'Hayre of AHA. The project was initiated with a site meeting with Crouch Environmental on February 25, 1994. Field work was conducted between March 2, 1994 and March 9, 1994. Field-generated data and laboratory analytical results were communicated to project members as received, and were complete by March 14, 1994.

The scope of work is described in Section 2.0. Results are presented in Section 3.0. Laboratory analytical reports are included in Appendix A.

2.0 SCOPE OF WORK

The work performed consisted of the following tasks:

- (1) Perform depth sounding profiles of inshore waters**
- (2) Sample inshore waters for salinity, dissolved oxygen, nutrients, and pollutants**
- (3) Sample inshore sediments for pollutants**
- (4) Sample shallow soils for pollutants**
- (5) Drill shallow soils to 15 ft, determine the depth of the pre-subsidence ground surface, and assess soil permeabilities**
- (6) Perform bathymetric surveying offshore**
- (7) Evaluate channel and cut plans, to determine likely tidal mixing**

Results of these tasks are presented in the above sequence in the following sections. Sample locations are presented on aerial photographs provided by Crouch Environmental Services.

3.0 RESULTS

3.1 Flooded Areas and Water Depths

Three distinct flooded areas were identified at the Brownwood Site during the March 1994 sampling program. These flooded or ponded areas were isolated from each other by land and are referred to as West Pond, Middle Pond and East Pond (see Figure 3-1). The west pond contains two arms, as shown on Figure 3-1. The east pond is connected to Crystal Bay by a channel with a concrete tide gate structure.

Water depths at each water sampling location were recorded as described in Section 3.2. Depth soundings were also taken at approximately 150 foot intervals across each pond using a staff gage. The depth sounding transects and directions are shown on Figure 3-1. Results were as follows:

East Pond: 2.2 ft, 1.8 ft., 2.0 ft. and 1.9 ft

Middle Pond: 2.1 ft, 1.4 ft., 1.5 ft. and 0.7 ft

West Pond: 0.5 ft, 1.1 ft., 1.0 ft., 1.4 ft. 1.5 ft, 1.9 ft and 0.9 ft

3.2 Water Samples

Nutrient samples, water depth, Secchi disc and field parameters (temperature, specific conductance, pH, and dissolved oxygen) were collected at several locations from each flooded area or pond as marked on Figure 3-2. Water depths were measured with a staff gauge. Secchi disc depths were measured with a tape. Samples were collected with a sampling bomb over a one foot interval. At locations of sufficient depth, samples were collected and analyzed for field parameters from the surface and at depth. A composite sample was collected for nutrient analysis unless there was a significant difference in field parameters with depth. In that case nutrient samples were collected from each depth interval. Results are presented in Table 3-1.

A composite water sample was collected at location 3 for laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen and total petroleum hydrocarbon. These results are presented in Tables 3-2 and 3-3.

WETLANDS ASSESSMENT
Hydrologic Evaluation

French Ltd. Project
 FLTG, Incorporated

Table 3-1
Inshore Waters
Water Depths, Nutrients and Field Parameters

Sample Number	Date	Temp. (deg. F)	pH	Field S.C. (us/cm)	Dissolved Oxygen (mg/l)	NH4 Conc. (mg/l)	Nitrate Conc. (mg/l)	Phosphate Conc. (mg/l)	Water Depth (ft)	Secchi Disc (inches)	Comments
1-S	3/4/94	60.7	7.63	8,100	6.9	<0.10	<0.05	<0.01	2.2	11	East Pond, 0-1 ft
1-D	3/4/94	62.8	8.00	8,140	4.1	<0.10	<0.05	<0.01	2.2	11	East Pond, 1- 2 ft
1-C	3/4/94								2.2	11	East Pond, depth composite
2-S	3/4/94	60.8	8.42	8,120	4.8				1.3	11	East Pond, 0-1 ft
2-D	3/4/94	60.5	8.57	8,060	4.8				1.3	11	East Pond, 0.3- 1.3 ft
2-C	3/4/94					<0.10	<0.05	<0.01	1.3	11	East Pond, depth composite
3-S	3/4/94	66.4	8.35	10,870	5.8				1.8	11	Middle Pond, 0-1 ft.
3-D	3/4/94	64.0	8.41	10,450	5.8				1.8	11	Middle Pond, 0.5- 1.5 ft.
3-C	3/4/94					0.11	<0.05	<0.01	1.8	11	Middle Pond, depth composite
4-S	3/4/94	67.0	8.48	9,870	5.2	<0.10	<0.05	<0.01	0.7	>0.7	Middle Pond, 0- 0.5 ft.
5-S	3/4/94	68.2	8.63	10,870	5.8	<0.10	<0.05	<0.01	1.1	10	West Pond, 0-1 ft.
6-S	3/4/94	68.6	9.00	11,950	6.2	<0.10	<0.05	<0.01	1.3	10	West Pond, 0-1 ft.

Notes

S = shallow
 D = deep
 C = composite

Table 3-2

Analytical Results - Organic Parameters

MEDIA	Area	Sample ID (S19)	VOCs	TOX	TPH	Pesticides PCBs
SOIL	North Area	A301	ND	0.2	ND	Chlordane, 21 ppb 4,4'-DDE, 13 ppb Dieldrin, 3.8 ppb
	Center Area	A302	ND	0.2	ND	ND
	Perimeter Area	A303	ND	ND	ND	4,4'-DDE, 13 ppb
WATER	Middle Pond #3	C301	Acetone 6	ND	ND	ND
SEDIMENTS	West Pond	A304	Acetone 24	ND	54	ND
	East Pond	A305	Acetone 6	ND	ND	ND

Notes

Units: VOCs - ppb; TOX/TPH - ppm

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WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
FLTG, Incorporated

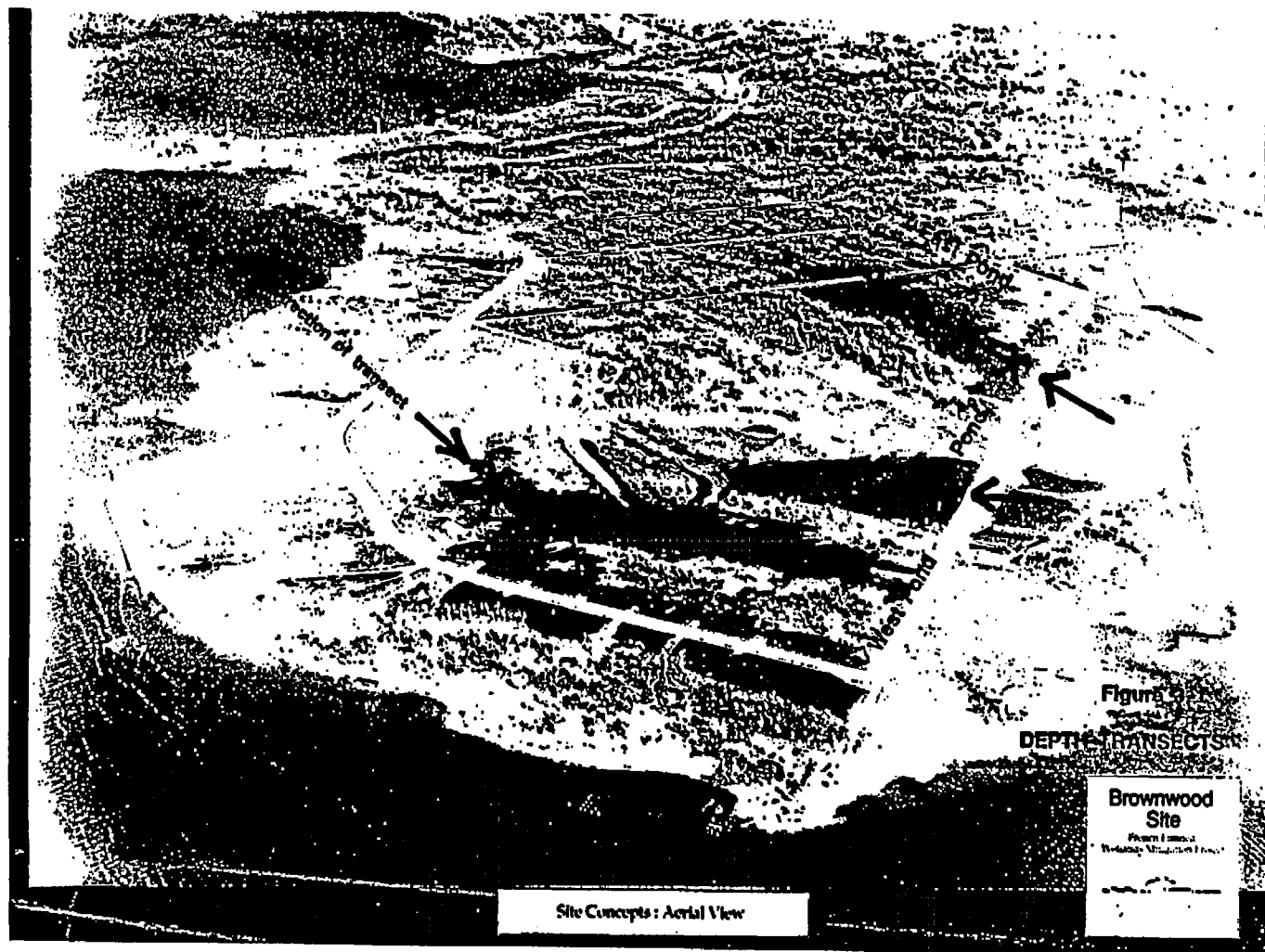
Table 3-3
Analytical Results - Metals

Media	SOIL			SEDIMENTS		WATER
Site	North Area	Center Area	Perimeter Area	West Pond	East Pond	M. Pond
Al	5,540	3,600	2,520	3,130	5,440	0
Sb	7.0	6.7	6.9	7.1	7.1	
As	5.40	2.00	0.99	1.10	1.80	0.04
Ba	25.0	22.2	22.1	22.1	48.0	104.0
Be	0.25	0.24	0.25	0.25	0.36	<.001
Cd	1.2	1.2	1.2	1.3	1.3	<.005
Ca	1,300	602	629	711	651	107
Cr	8.0	4.9	3.3	3.5	6.5	<0.004
Co	2.1	2.0	1.2	1.3	7.0	<.005
Cu	15.1	3.2	2.9	4.3	3.5	<.005
Fe	4,320	4,860	2,180	2,670	5,290	79
Pb	45.0	11.1	13.0	20.2	18.5	<.001
Mg	656	334	348	454	795	216
Mn	81	103	64	34	168	0
Hg	0.13	0.12	0.12	0.13	0.13	<.0002
Ni	6.7	4.6	4.7	4.8	4.8	<.019
K	200	269	278	285	284	69
Se	0.25	0.24	0.25	0.25	0.25	<.005
Ag	0.75	0.72	0.74	0.76	0.76	<.003
Na	1,010	229	664	747	1,050	188
Th	0.8	0.7	0.7	0.8	0.8	<.003
Va	12.8	10.8	6.4	7.1	16.1	<.004
Zn	32.2	15.8	27.6	16.2	14.7	0.0

Units: ppm

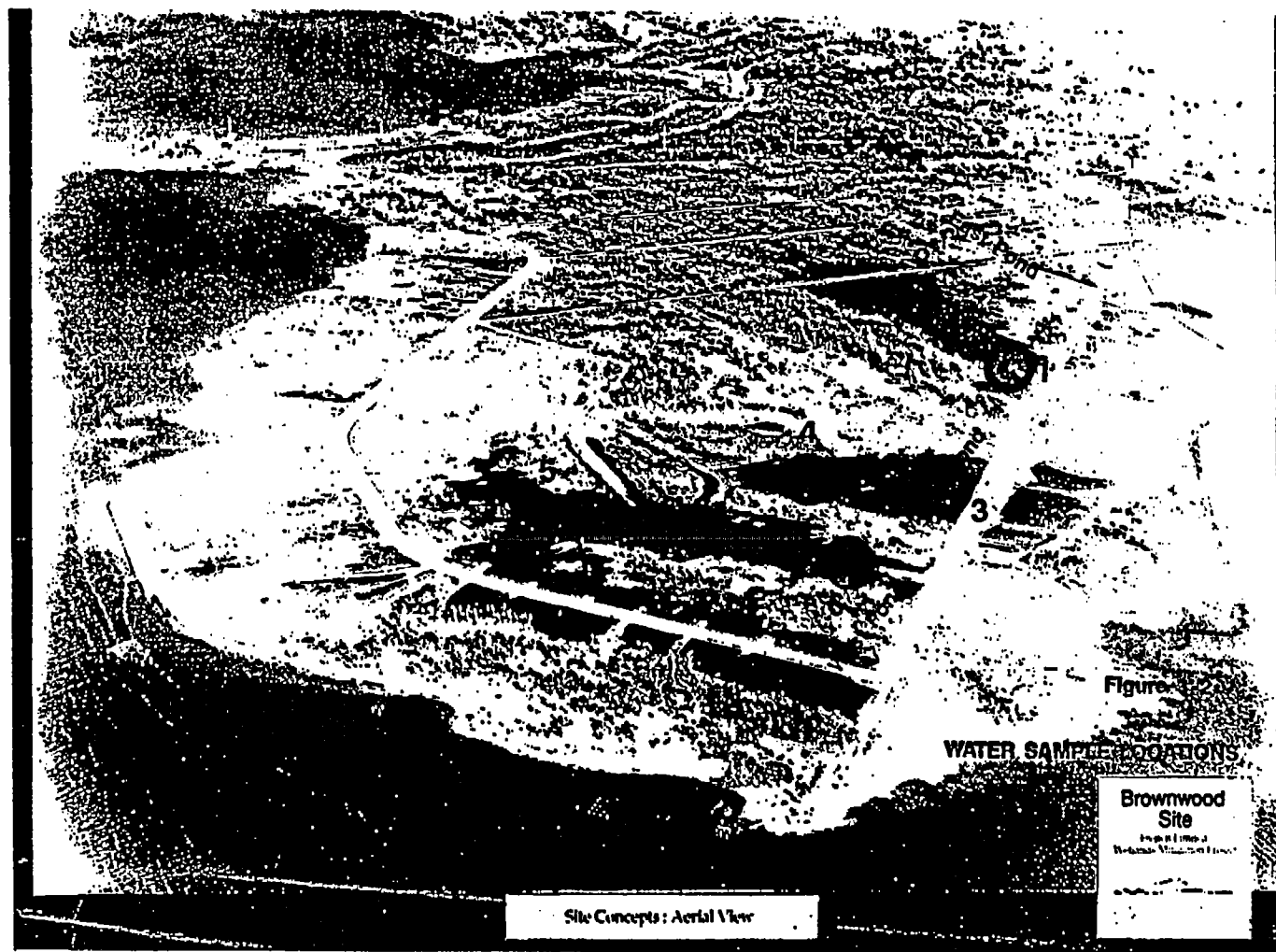
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Figure 3-1



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Figure 3-2



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WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site**French Ltd. Project**
FLTG, Incorporated**3.3 Sediment Samples**

Laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen and total petroleum hydrocarbon were performed for two composite sediment samples from the ponded areas. The West Pond composite was comprised of sample numbers 11 and 20 from the west pond and sample number 9 from the middle pond. The East Pond composite was comprised of sample numbers 7, 19 and 14 from the east pond. These sample locations are shown on Figure 3-3.

Sediment samples were taken with a 1 foot split spoon sampler driven into the sediments at the sample location. Chemical analytical results are presented in Tables 3-2 and 3-3. Field logs for these sediment samples are presented below:

Sample No. 7:	Water depth 1.5 ft., dark brown sandy loam
Sample No. 9:	Water depth 1 ft., sandy loam soil dark brown grading to tan with depth
Sample No. 11:	Water depth 1 ft., sandy loam dark brown soil with organic material and shingle debris
Sample No. 14:	Water depth 1.9 ft., medium brown sandy clay loam
Sample No. 19:	Water depth 1.5 ft., dark brown clay loam
Sample No. 20:	Water depth 0.75 ft., sandy loam dark brown soil

3.4 Soil Samples

Composite soil samples for laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen and total petroleum hydrocarbon were collected from three land areas. The North Area composite comprised sample numbers 1, 2, 3 and 4 from north of the site, approximately 100 feet from the perimeter road. These samples were taken in a location of potential channel excavation to improve water circulation with Crystal Bay. The Central Area composite comprised sample numbers 15, 16, 17 and 18 from a higher elevation area in the center of the site. The Perimeter composite comprised sample numbers 5, 6, 8, 12 13, and 19 located on the west, south and east perimeter of the site. These sample locations are shown on Figure 3-4.

Soil samples consisted of composite cuttings collected by driving a powered auger to a depth of approximately 3 feet at each sample location. Samples were composited by area in the lab. Chemical analytical results are provided in Table 3-2. Field logs for these soil samples are provided in Table 3-4.

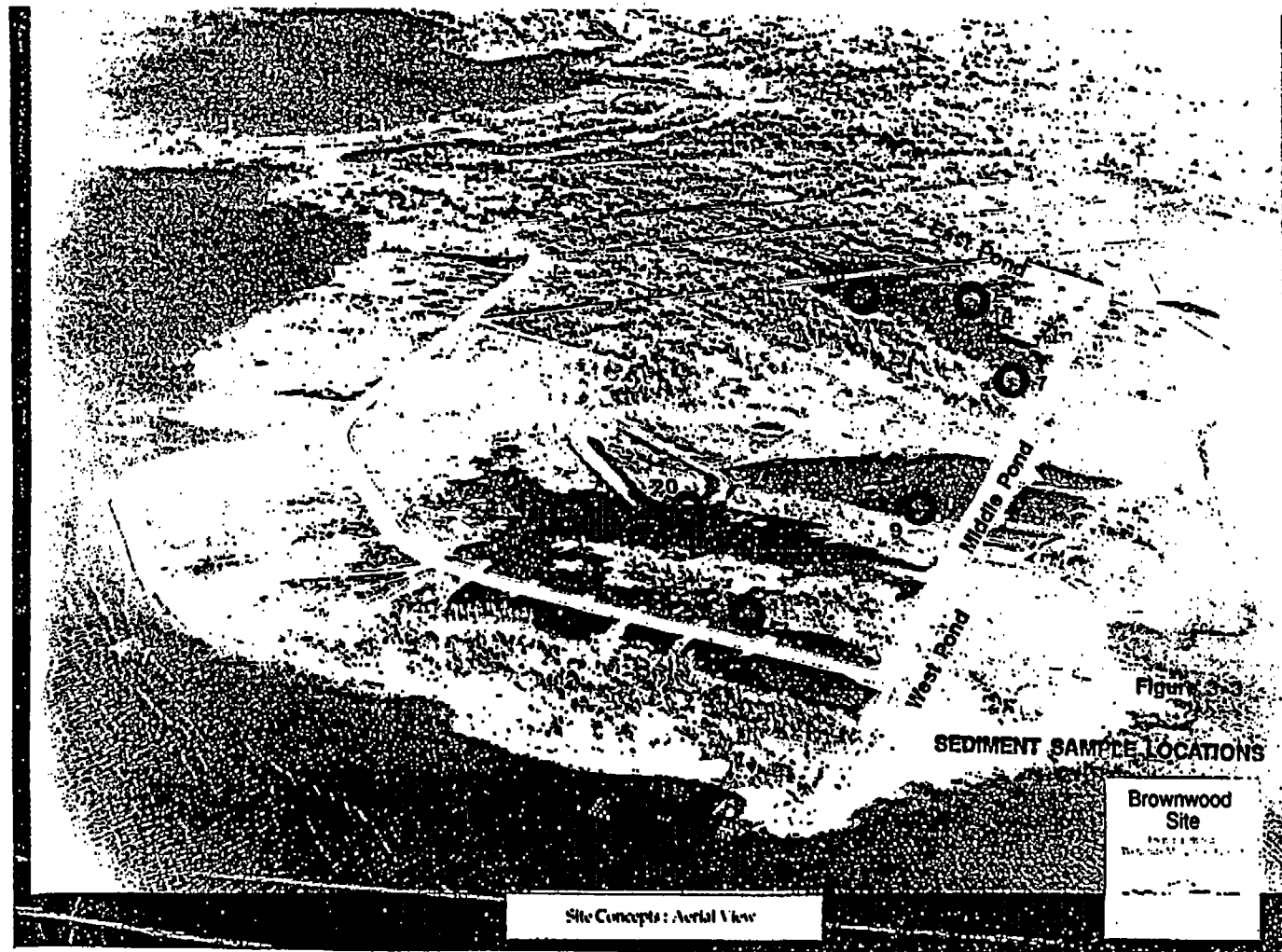
WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
 FLTG, Incorporated

Table 3-4
Soil Sample Field Logs

Sample	Description
1	Clay loam dark, brown soil, saturated at surface
2	Dark tan silty clay, wet at surface
3	Silty loam, moist at surface, saturated at 3 ft.; crawdad holes in area
4	Brown silty loam 0-2 ft.; yellow stiff clay 2-3 ft.; trashy area near driveway close to east pond.
5	Dark brown organic loam 0-0.5 ft, light brown sandy clay with orange mottling 0.5 - 3 ft..
6	Brown silty clay loam 0-2.5 ft.; tan silty clay with orange mottling 2.5-3 ft.
8	Stratified tan sand with brown sandy clay layers 0-2.5 ft; gray sandy clay loam 2.5-3 ft.; standing water around site
10	Medium brown sand back yard of home site near fence and bushes
12	Dark brown sandy loam; saturated at surface debris and trash about area in front of abandoned house
13	Brown sand 0-2 ft.; tan sand 2-3 ft. moist but not saturated, brush and grass in area.
15	Medium brown sandy loam, saturated at 1.5 ft; grassy area on rise above marshy area.
16	Moist sandy loam 0-2 ft.; mottled red and brown clay 2-3 ft. near tall trees
17	Moist medium brown clay loam 0-2 ft.; Moist sandy loam 2-3 ft.
18	Medium brown sandy loam saturated at 1.5 ft.; tall grassy area

Figure 3-3



80616

Figure 3-4

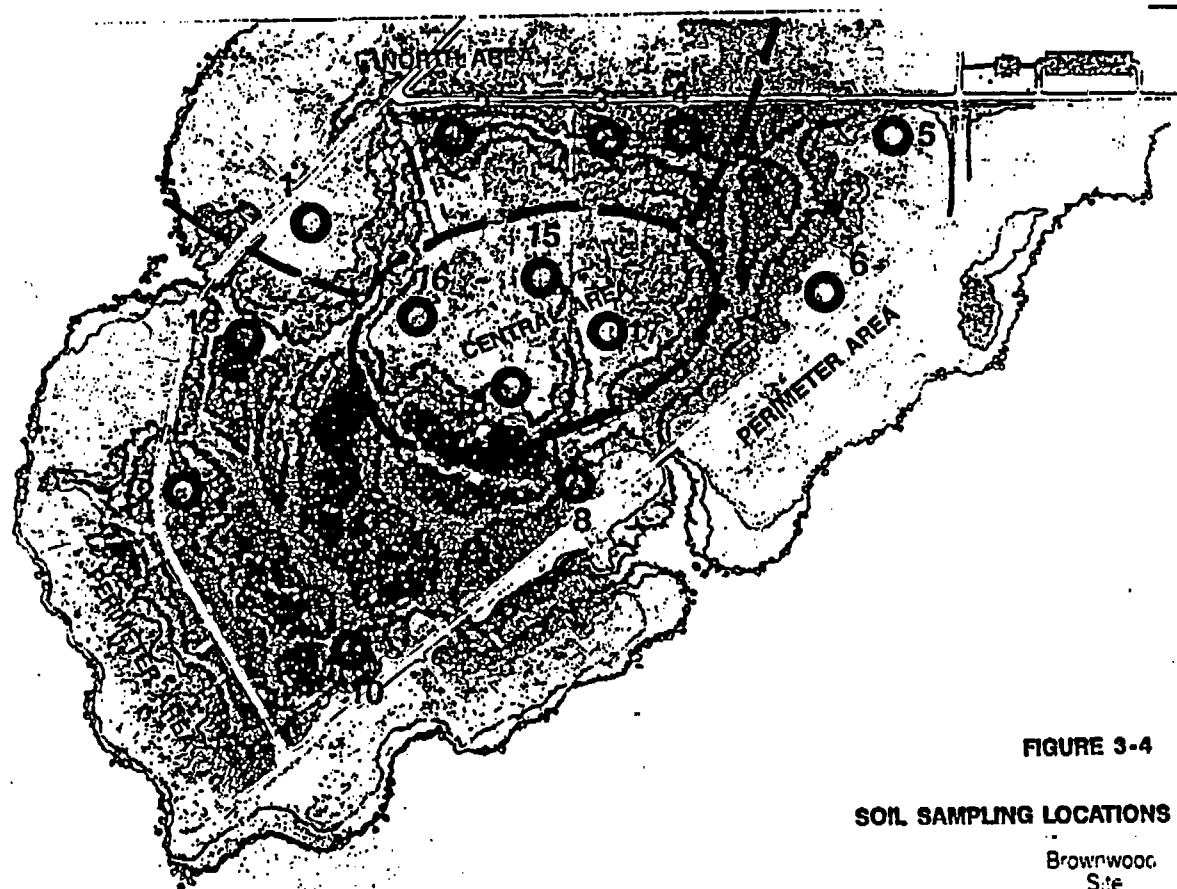


FIGURE 3-4

SOIL SAMPLING LOCATIONS

Brownwood
Site

Site Concepts: Detail Map

3.5 Drilling & Stratigraphy

Soil borings were performed by Layne Environmental Services using a CME 75 hollow-stem auger rig equipped with 2-inch-diameter split-spoon samplers. Samples were collected from the ground surface to a nominal depth of 15 feet, at two-foot intervals. Samples were logged by Jim Thomson of AHA. Soil boring locations are shown in Figure 3-5. Boring logs are presented in Figures 3-6 through 3-8. Samples were discarded after logging and the hole was backfilled with soil cuttings. At boring BW-1, a duplicate core was preserved in acrylic liners. Boring locations were pegged for future surveying.

The shallow soil stratigraphy at the Brownwood site is characterized by alluvial silts and sands, and marine to estuarine clays and silts. All units appeared to be natural features, with layering diagnostic of sedimentary deposition. Surface soils near the shore consisted of approximately 4 feet of fine to medium sand of estimated moderate permeability, which would allow moderate seepage rates. A characteristic gray to brown stiff clay was identified at 1.1 ft at BW-1, 3.7 ft at BW-2, and 4.5 ft at BW-3. A distinctive light gray tan lower sand was identified at 11 ft at BW-1, 7.2 ft at BW-2, 9.8 ft at BW-3. In general, these formations were found at lower depths in the west to southwest, suggesting that subsidence was greater in this direction.

Two layers of clam shell remains were identified at BW-1 at 1.0 to 1.6 ft. These layers appear to correlate with layering of shelly material along the beach at the southwest point, and may be of archeological interest. No obvious pre-subsidence surface could be identified.

3.6 Offshore Water Depths

Profiles of offshore water depths were obtained using a depth sounder with strip chart on a series of profiles. Each profile began in relatively deep water and continued at a steady speed along a fixed bearing toward shore until shallow water preventing further movement was reached. The sounding logs were not corrected for tidal variation, and are not controlled horizontally. However, they give a general picture of water depths in the offshore area. The sounder was six inches below water: this must be added to logged depths to get actual water depth.

Soundings were performed along four profiles on the northwest shore, as shown on Figure 3-9. Sounding logs are presented in Figures 3-10 and 3-11. The logs show that in this area, deeper water (9 to 11 feet deep) offshore gives way to a fairly broad shallower bank (2 to 3 feet deep) that slopes gently up to the shoreline.

80619

Figure 3-5

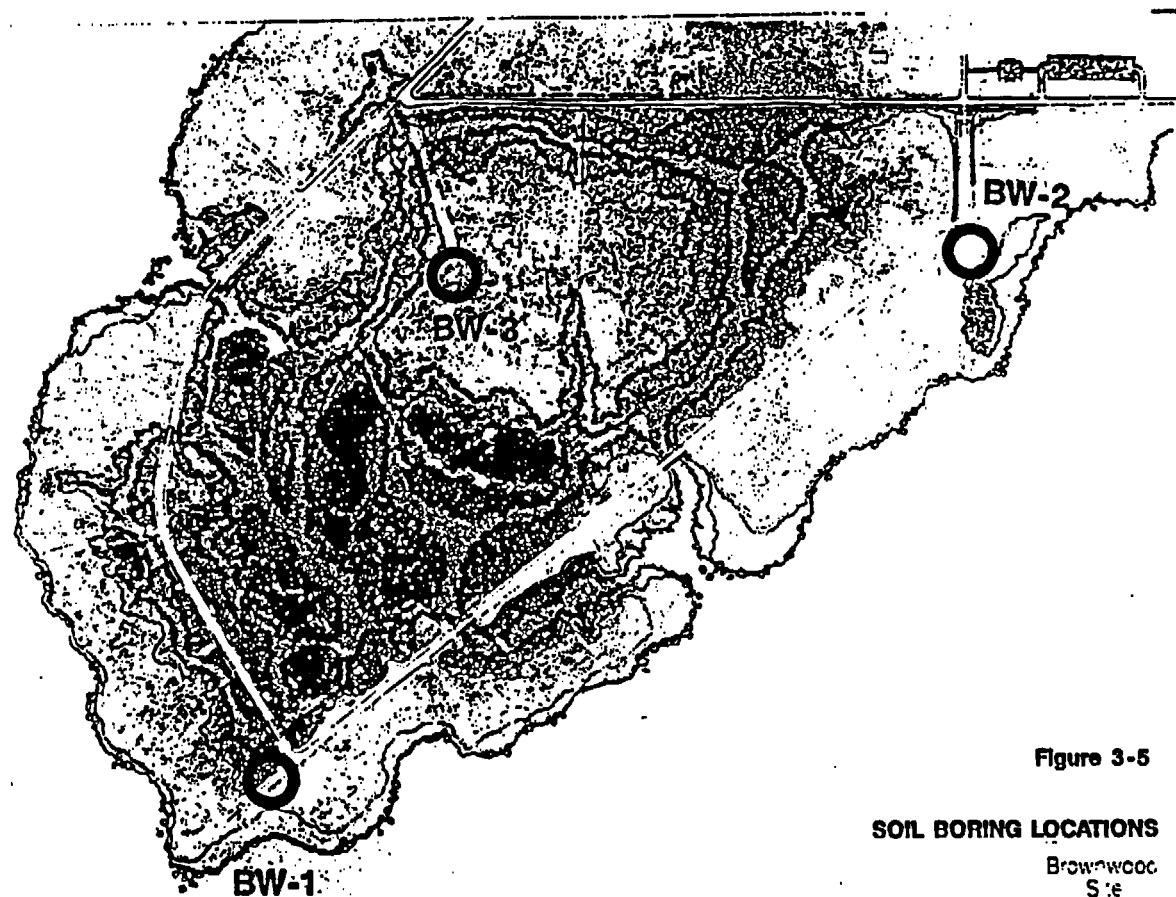


Figure 3-5

SOIL BORING LOCATIONS
Brownwood
Site

Site Concepts : Detail Map

WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
FLTG, Incorporated

Figure 3-6

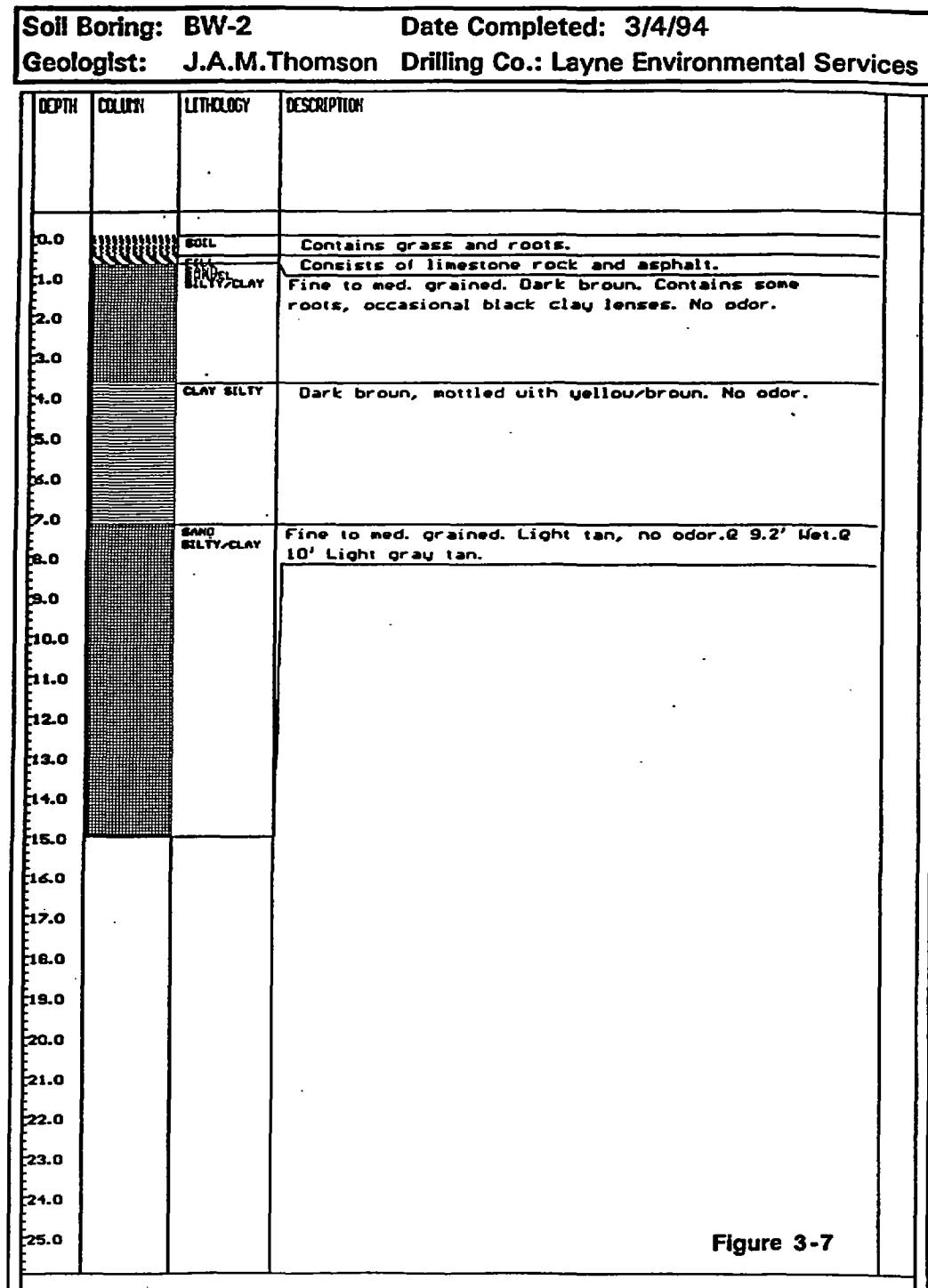
Soil Boring: BW-1		Date Completed: 3/4/94	
Geologist: J.A.M. Thomson		Drilling Co.: Layne Environmental Services	
DEPTH	COLUMN	LITHOLOGY	DESCRIPTION
0.0		SAND	Light brown, contains plant matter, poorly laminated.
1.0		BASE	Contains clam shell fragments.
2.0		BASE	Contains clam shell fragments.
3.0			
4.0		CLAY	Dark brown.
5.0		CLAY	Stiff, gray with yellow/brown mottling. @ 6.2' mottling is light brown.
6.0			Light brown.
7.0			
8.0			
9.0			
10.0		CLAY SANDY	
		CLAY	
11.0		CLAY SANDY	Gray tan.
12.0		SAND CLAYEY	Gray tan.
		SAND	Wet, no odor, pale tan.
13.0			
14.0			
15.0			
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

Figure 3-6

WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
 FLTG, Incorporated

Figure 3-7



WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
 FLTG, Incorporated

Figure 3-8

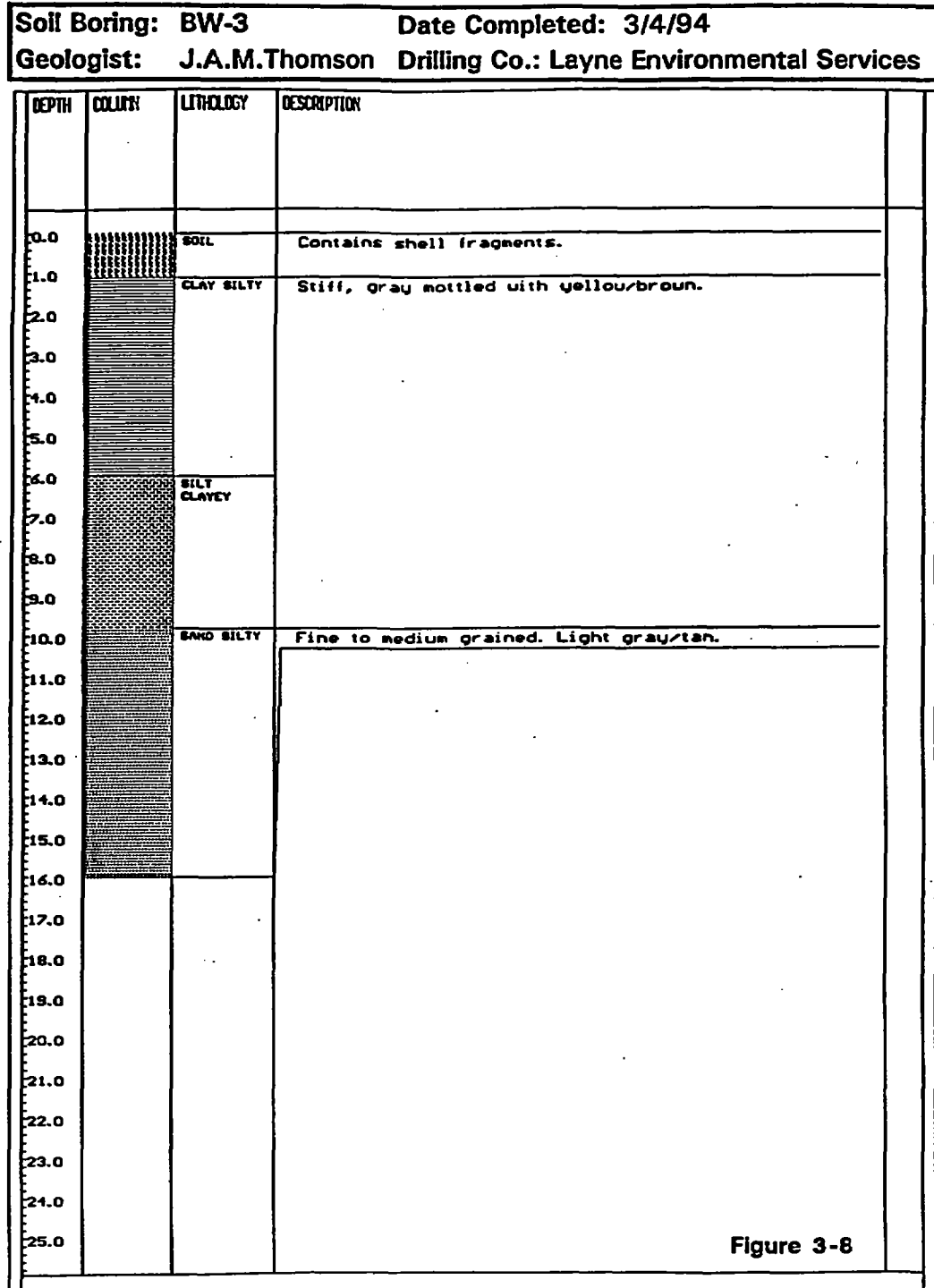


Figure 3-9

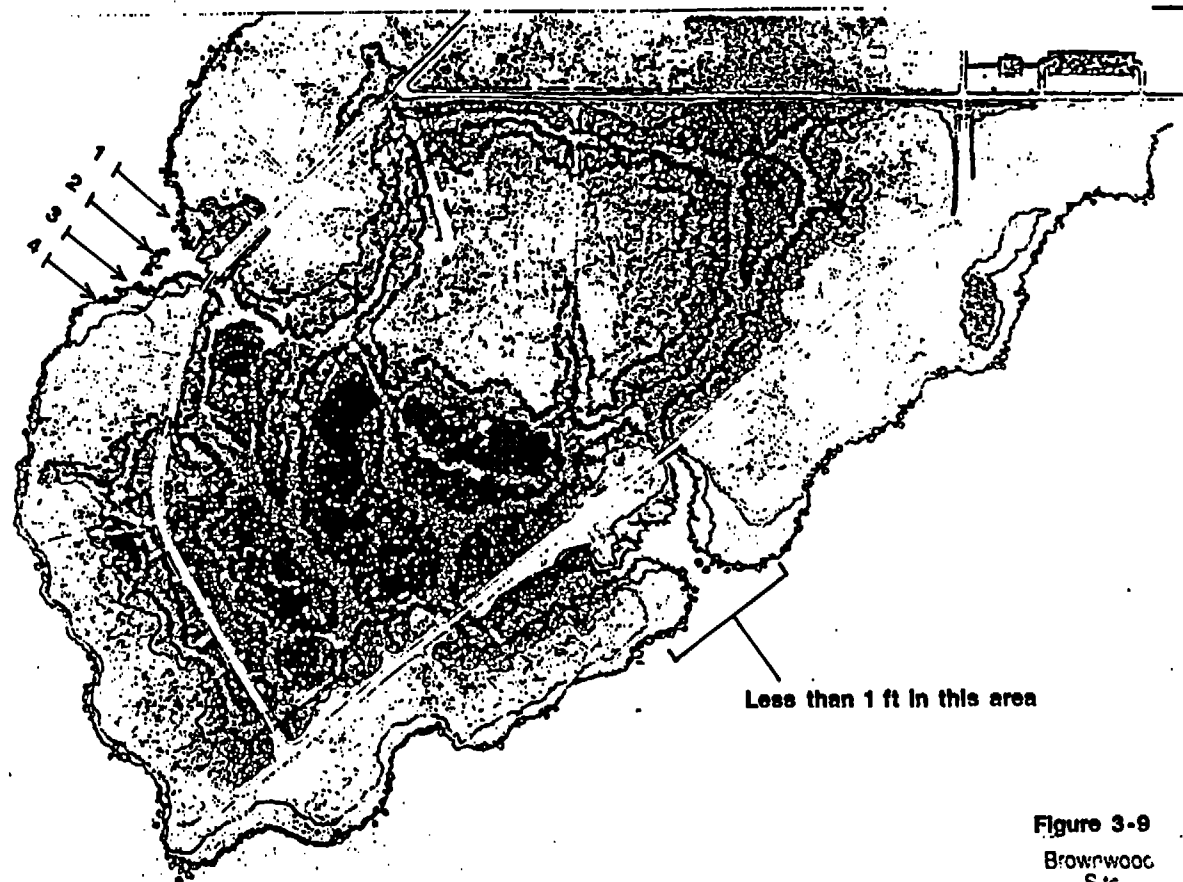


Figure 3-9
Brownwood
Site

Bathymetric Profiles

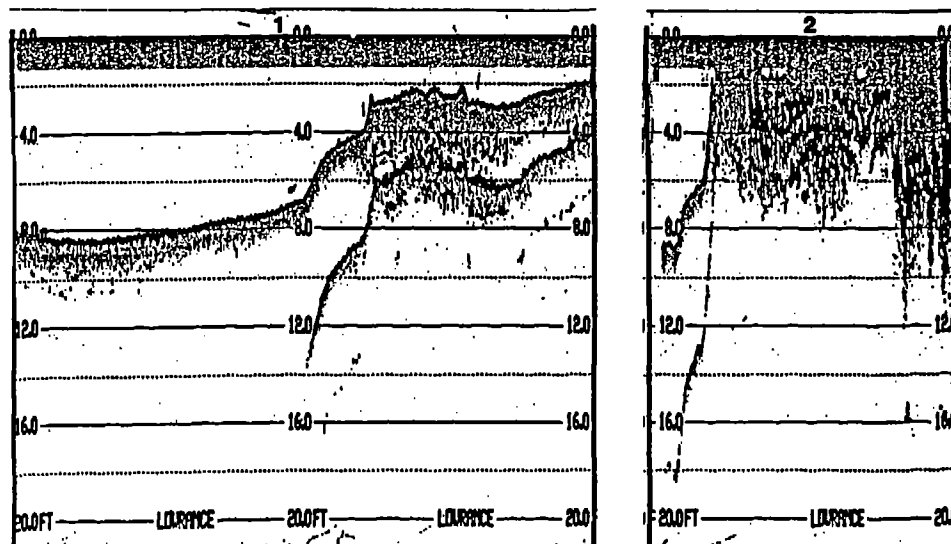
Site Concepts: Detail Map

80623

Figure 3-10

Figure 3-10
Brownwood Offshore Soundings

Profile 1,2
Time _____
Bearing _____

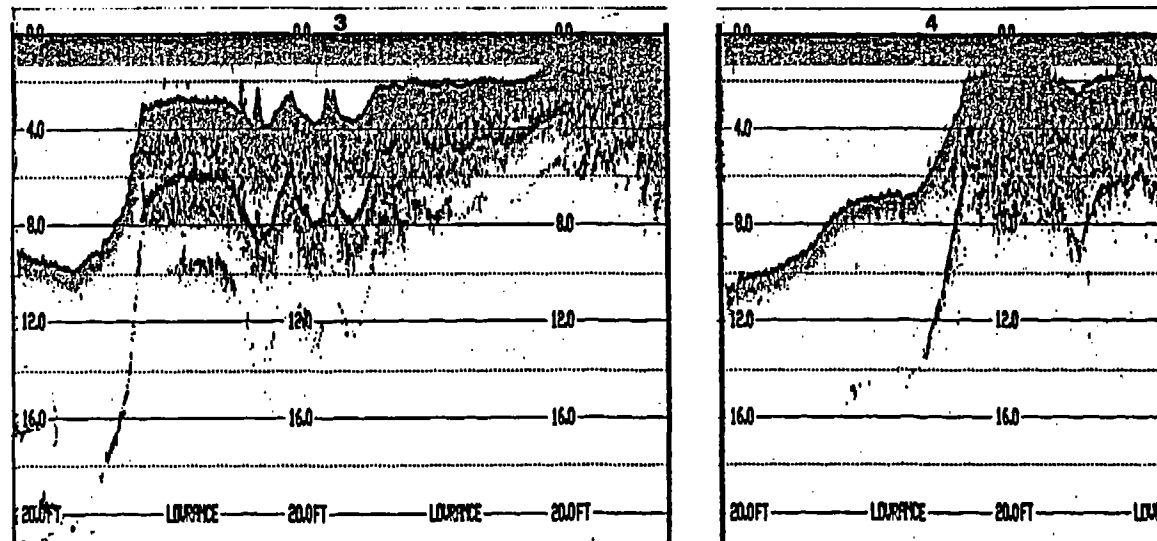


Soundings toward shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-11

Figure 3-11
Brownwood Offshore Soundings

Profile	3,4
Time	
Bearing	



Soundings toward shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

3.7 Tidal Mixing Evaluation

Tidal mixing appears to be good between the East Pond and Crystal Bay. Field observations indicated significant water movement through the tidal gate and channel which connects the East Pond with Crystal Bay and the San Jacinto Estuary. There was no field evidence of tidal mixing with the Middle and West ponds and Crystal Bay: temperatures and specific conductance in these isolated ponds appears to be significantly higher. Hydraulic conductivities of subsurface material may be sufficient for tidal fluctuations to be observed in the isolated ponds but the time interval between tide peak and trough is too short to allow for tidal mixing through the subsurface.

WETLANDS ASSESSMENT
Hydrologic Evaluation - Brownwood Site

French Ltd. Project
FLTG, Incorporated

APPENDIX A
LABORATORY ANALYTICAL REPORTS

Sample No.	Sample Collected Date	Location
- S19A000301	3/03/94	North Area
- S19A000302	3/03/94	Central Area
- S19A000303	3/03/94	Perimeter
- S19A000304	3/03/94	West Pond
- S19A000305	3/03/94	East Pond
S19A000401	3/04/94	North Area
S19A000402	3/04/94	South Area
S19A000403	3/04/94	PL1-PL5
S19A000501	3/07/94	MPS-1
S19A000502	3/07/94	OS-1
- S19C000301	3/04/94	#3
S19C000302	3/04/94	MP-3
- S19F000101	3/05/94	1-D
- S19F000102	3/05/94	1-S
- S19F000103	3/05/94	2-C
- S19F000104	3/05/94	4-S
- S19F000105	3/05/94	5-S
- S19F000106	3/05/94	6-S
S19F000107	3/05/94	MP1
S19F000108	3/05/94	MP2

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10-MAR-1994

Page 1

Summary of Analytical Results

Date received: 4-MAR-1994 Customer: FURG, INC. Job name: H94-03.51

Samples

Order/ Lab/et ID	SI-001	SI-002	SI-003	SI-004	SI-005	SI-006
Sampling Point:	QA CC	X	QA CC	QA CC	X	X
Date Sampled	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994
Customer ID	123 BLANK	SI9900301	SI9900301	SI9900301	SI9900302	SI9900303
	NA	NA	HP	PS	NA	NA

Parameters

Units

Total Organic Halogens (Solid) mg/Kg 110 * <4.0 <5.0

Analyte: HNS

Date/Time: 03/07/94 10:00

Dilution: 1.0

Total Pet. Hydrocarbons (Solid) mg/Kg 99.3 * <1.0 <1.0

Analyte: ETL/OC3

Date/Time: 03/09/94 10:00

Dilution: 1.0

* - Recovery
NR - Not Required
NA - Not Applicable

Summary of Analytical Results

Date received: 4-MAR-1994 Customer: FILING, INC. Job name: H94-03-57

Samples	Chester Label ID	Sampling Point	Date Sampled	Customer ID
SI-007	X	3-MR-1994	SI9E00304	NA
SI-008	X	3-MR-1994	SI9E00305	NA

Parameters		Units
Total Organic Halogens (Solid)	mg/kg	<6.0
Analyte: PHS		
Date/Time: 03/07/94 10:00		
Dilution: 1.0		
Total Pet. Hydrocarbons (Solid)	mg/kg	54.0
Analyte: ETL/COS		
Date/Time: 03/09/94 10:00		
Dilution: 1.0		
		<32.0

* -- & Recovery
 NA - Not Required
 NA - Not Applicable

80631

INBT ID: 4020

SAMPLE NUMBER: B19A000301

ORGANICS ANALYSIS DATA SHEET

BROWNWOOD
NORTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940200102

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V02

DILUTION FACTOR: 1.20

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010 CHLOROMETHANE	12 U	
C010 BROMOMETHANE	12 U	
C020 VINYL CHLORIDE	12 U	
C025 CHLOROETHANE	12 U	
C030 METHYLENE CHLORIDE	6 U	
C035 ACETONE	12 U	
C040 CARBON DISULFIDE	6 U	
C045 1,1-DICHLOROETHENE	6 U	
C050 1,1-DICHLOROETHANE	6 U	
C055 1,2-DICHLOROETHENE (TOTAL)	6 U	
C060 CHLOROFORM	6 U	
C065 1,2-DICHLOROETHANE	6 U	
C110 2-BUTANONE	12 U	
C115 1,1,1-TRICHLOROETHANE	6 U	
C120 CARBON TETRACHLORIDE	6 U	
C125 VINYL ACETATE	12 U	
C130 BROMODICHLOROMETHANE	6 U	
C140 1,2-DICHLOROPROPANE	6 U	
C145 C15-1,3-DICHLOROPROPENE	6 U	
C150 TRICHLOROETHENE	6 U	
C155 DIBROMOCHLOROMETHANE	6 U	
C160 1,1,2-TRICHLOROETHANE	6 U	
C165 BENZENE	6 U	
C172 TRANS-1,3-DICHLOROPROPENE	6 U	
C175 2-CHLOROETHYL VINYLETHER	12 U	
C180 BROMOFORM	6 U	
C205 4-METHYL-2-PENTANONE	12 U	
C210 2-HEXANONE	12 U	
C220 TETRACHLOROETHENE	6 U	
C225 1,1,2,2-TETRACHLOROETHANE	6 U	
C230 TOLUENE	6 U	
C235 CHLOROBENZENE	6 U	
C240 ETHYLBENZENE	6 U	
C245 STYRENE	6 U	
C250 XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80632

CHESTER DC # ---- 8

INST ID: 4020

SAMPLE NUMBER: 819A000302

ORGANICS ANALYSIS DATA SHEET

BROWNWOOD
CENTRAL AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305105

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V05

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C018	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C028	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C038	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C048	1,1-DICHLOROETHENE	6 U	
C080	1,1-DICHLOROETHANE	6 U	
C053	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C068	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C118	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C143	CIS-1,2-DICHLOROPROPENE	6 U	
C180	TRICHLOROETHENE	6 U	
C188	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C168	BENZENE	6 U	
C172	TRANS-1,2-DICHLOROPROPENE	6 U	
C178	2-CHLOROETHYL VINYLETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C248	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80633

INST ID: 4020

CHESTER DC # ---- 8
SAMPLE NUMBER: 819A000303

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
PERIMETER AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940308106

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATAFILE: RU03051V06

DATE ANALYZED: 03/11/94

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLORMETHANE	12 U	
C015	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C052	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C145	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYL ETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80634

INBT ID: 4020

CHESTER DC # ---- 8

SAMPLE NUMBER: 819A000304

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
WEST POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305107

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V07

DILUTION FACTOR: 1.30

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	13 U	
C015	BROMOMETHANE	13 U	
C020	VINYL CHLORIDE	13 U	
C025	CHLOROETHANE	13 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	13	24
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C053	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	13 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	13 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C143	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYL ETHER	13 U	
C180	BROMOFORM	6 U	
C203	4-METHYL-2-PENTANONE	13 U	
C210	2-HEXANONE	13 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80635

INSET ID: 4020

CHESTER DC # ---- B
SAMPLE NUMBER: 619A000305

ORGANICS ANALYSIS DATA SHEET

BROWNWOOD
EAST POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305108

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V08

DILUTION FACTOR: 1.30

COMPOUND	DETECTION	AMOUNT
	LIMIT (MICROGRAMS / KG)	FOUND
C010 CHLOROMETHANE	13 U	
C015 BROMOMETHANE	13 U	
C020 VINYL CHLORIDE	13 U	
C025 CHLOROETHANE	13 U	
C030 METHYLENE CHLORIDE	6 U	
C035 ACETONE	13	6 J
C040 CARBON DISULFIDE	6 U	
C045 1,1-DICHLOROETHENE	6 U	
C050 1,1-DICHLOROETHANE	6 U	
C055 1,2-DICHLOROETHENE (TOTAL)	6 U	
C060 CHLOROFORM	6 U	
C065 1,2-DICHLOROETHANE	6 U	
C110 2-BUTANONE	13 U	
C115 1,1,1-TRICHLOROETHANE	6 U	
C120 CARBON TETRACHLORIDE	6 U	
C125 VINYL ACETATE	13 U	
C130 BROMODICHLOROMETHANE	6 U	
C140 1,2-DICHLOROPROPANE	6 U	
C145 C18-1,3-DICHLOROPROPENE	6 U	
C150 TRICHLOROETHENE	6 U	
C155 DIBROMOCHLOROMETHANE	6 U	
C160 1,1,2-TRICHLOROETHANE	6 U	
C165 BENZENE	6 U	
C172 TRANS-1,3-DICHLOROPROPENE	6 U	
C175 2-CHLOROETHYL VINYLETHER	13 U	
C180 BROMOFORM	6 U	
C205 4-METHYL-2-PENTANONE	13 U	
C210 2-HEXANONE	13 U	
C220 TETRACHLOROETHENE	6 U	
C225 1,1,2,2-TETRACHLOROETHANE	6 U	
C230 TOLUENE	6 U	
C235 CHLOROBENZENE	6 U	
C240 ETHYLBENZENE	6 U	
C245 STYRENE	6 U	
C250 XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

. = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

TOTAL P.05

80633

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0310 040
 Sample Name : H94-03.51-002
 Project No. : S19A
 Percent Moisture : 19 %
 Client ID : S19A0003 01

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 10:10 Dilution Factor : 1.000
 Analyzed by : 6368657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.8	21	
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.2	13	
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.83	3.8	
959-98-8	ENDOSULFAN I	8.3	8.3	U
33213-65-9	ENDOSULFAN II	8.3	8.3	U
1031-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11007-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J - Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80637

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAPO310-046
 Sample Name : H94-03.51-005
 Project No. : S19A
 Percent Moisture : 16 %
 Client ID : S19A0003 02

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : MTM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 08:37 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.40	0.40	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.6	5.6	U
72-54-8	4,4'-DDD	2.0	2.0	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.8	4.8	U
60-57-1	DIELDRIN	0.80	0.80	U
959-98-8	ENDOSULFAN I	8.0	8.0	U
33213-65-9	ENDOSULFAN II	8.0	8.0	U
1031-07-A	ENDOSULFAN SULFATE	4.0	4.0	U
72-20-8	ENDRIN	2.4	2.4	U
7421-93-4	ENDRIN ALDEHYDE	4.0	4.0	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.0	2.0	U
72-43-5	METHOXYCHLOR	20	20	U
8001-35-2	TOXAPHENE	96	96	U
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR 1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
53469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097 69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80638

Chaster LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-034
Sample Name : H94-03.51-005
Project No. : S19A
Client ID : S19A0003 02

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MJM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 15:35 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR-1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
53469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097-69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U
	TOTAL PCBS *	20	20	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80639

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0310-047
 Sample Name : H94-03.51-006
 Project No. : S19A
 Percent Moisture : 19 %
 Client ID : S19A0003 03

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : M/M

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 09:24 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.6	5.6	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.2	13	
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.83	0.83	U
959-98-8	ENDOSULFAN I	8.3	8.3	U
33213-65-9	ENDOSULFAN II	8.3	8.3	U
1031-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

083619

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBP0307-035
 Sample Name : H94-03.51-006
 Project No. : S19A
 Client ID : S19A0003 03

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : M5M

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 16:22 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-0	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U
	TOTAL PCBS *	21	21	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAPO310-053
 Sample Name : H94-03.51-007
 Project No. : S19A
 Percent Moisture : 23 %
 Client ID : S19A0003 04

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : MJA

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analysed : 12-MAR-1994 14:03 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.44	0.44	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAMMA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	6.1	6.1	U
72-54-8	4,4'-DDD	2.2	2.2	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.2	5.2	U
60-57-1	DIELDRIN	0.87	0.87	U
959-98-8	ENDOSULFAN I	8.7	8.7	U
33213-65-9	ENDOSULFAN II	8.7	8.7	U
1031-07-8	ENDOSULFAN SULFATE	4.4	4.4	U
72-20-8	ENDRIN	2.6	2.6	U
7421-93-4	ENDRIN ALDEHYDE	4.4	4.4	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.2	2.2	U
72-43-5	METHOXYCHLOR	22	22	U
8001-35-2	TOXAPHENE	110	110	U
12674-11-2	AROCLOR-1016	22	22	U
11104-28-2	AROCLOR-1221	22	22	U
11141-16-5	AROCLOR-1232	22	22	U
53469-21-9	AROCLOR-1242	22	22	U
12672-29-6	AROCLOR-1246	22	22	U
11097-69-1	AROCLOR-1254	22	22	U
11096-82-5	AROCLOR-1260	22	22	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80642

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBP0307-036
 Sample Name : H94-03.51-007
 Project No. : S19A
 Client ID : S19A0003 04

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : Mjm

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 17:08 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	22	22	U
11104-28-2	AROCLOR-1221	22	22	U
11141-16-5	AROCLOR-1232	22	22	U
53469-21-9	AROCLOR-1242	22	22	U
12672-29-6	AROCLOR-1248	22	22	U
11097-69-1	AROCLOR-1254	22	22	U
11096-82-5	AROCLOR-1260	22	22	U
	TOTAL PCBs *	22	22	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAPO310-052
 Sample Name : H94-03.51-008
 Project No. : S19A
 Percent Moisture : 22 %
 Client ID : S19A0003 US

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : NTM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 13:16 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.43	0.43	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAMMA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	6.0	6.0	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.1	5.1	U
60-57-1	DIELDRIN	0.86	0.86	U
959-98-8	ENDOSULFAN I	8.6	8.6	U
33213-65-9	ENDOSULFAN II	8.6	8.6	U
1031-07-8	ENDOSULFAN SULFATE	4.3	4.3	U
72-20-8	ENDRIN	2.6	2.6	U
7421-93-4	ENDRIN ALDEHYDE	1.3	1.3	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
6001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-037
Sample Name : H94-03.51-006
Project No. : S19A
Client ID : S19A0003 05

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MJM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 17:55 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U
	TOTAL PCBS *	21	21	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80645

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000301

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351002

Level (low/med): LOW

Date Received: 03/04/94

Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5540.00			P
7440-36-0	Antimony	7.00	U		P
7440-38-2	Arsenic	5.40		SN	F
7440-39-3	Barium	25.00	B		P
7440-41-7	Beryllium	0.25	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	1300.00			P
7440-47-3	Chromium	8.00			P
7440-48-4	Cobalt	2.10	B		P
7440-50-8	Copper	15.10			P
7439-89-6	Iron	4320.00			P
7439-92-1	Lead	45.00			F
7439-95-4	Magnesium	656.00	B		P
7439-96-5	Manganese	80.80			P
7439-97-6	Mercury	0.13	U	*	CV
7440-02-0	Nickel	6.70	B		P
7440-09-7	Potassium	200.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.75	U		P
7440-23-5	Sodium	1010.00	B	E	P
7440-28-0	Thallium	0.75	U		F
7440-62-2	Vanadium	12.80			P
7440-66-6	Zinc	32.20		E	P
	Cyanide				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80646

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000302

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351005

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 83.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	3600.00			P
7440-36-0	Antimony_	6.70	U		P
7440-38-2	Arsenic_	2.00	B	+N	F
7440-39-3	Barium_	22.20	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium_	1.20	U		P
7440-70-2	Calcium_	602.00	B		P
7440-47-3	Chromium_	4.90			P
7440-48-4	Cobalt_	2.00	B		P
7440-50-8	Copper_	3.20	B		P
7439-89-6	Iron_	4860.00			P
7439-92-1	Lead_	11.10			F
7439-95-4	Magnesium	334.00	B		P
7439-96-5	Manganese	103.00			P
7439-97-6	Mercury_	0.12	U	*	CV
7440-02-0	Nickel_	4.60	U		P
7440-09-7	Potassium	269.00	U		P
7782-49-2	Selenium_	0.24	U		F
7440-22-4	Silver_	0.72	U		P
7440-23-5	Sodium_	229.00	B	E	P
7440-28-0	Thallium_	0.72	U		F
7440-62-2	Vanadium_	10.80	B		P
7440-66-6	Zinc_	15.80		E	C
	Cyanide_				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80647

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000303

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351006

Level (low/med): LOW

Date Received: 03/04/94

Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	2520.00			P
7440-36-0	Antimony_	6.90	U		P
7440-38-2	Arsenic_	0.99	U	WN	F
7440-39-3	Barium_	22.10	B		P
7440-41-7	Beryllium_	0.25	U		P
7440-43-9	Cadmium_	1.20	U		P
7440-70-2	Calcium_	629.00	B		P
7440-47-3	Chromium_	3.30			P
7440-48-4	Cobalt_	1.20	U		P
7440-50-8	Copper_	2.90	B		P
7439-89-6	Iron_	2180.00			P
7439-92-1	Lead_	13.00			P
7439-95-4	Magnesium_	348.00	B		P
7439-96-5	Manganese_	63.50			P
7439-97-6	Mercury_	0.12	U	*	CV
7440-02-0	Nickel_	4.70	U		P
7440-09-7	Potassium_	278.00	U		P
7782-49-2	Selenium_	0.25	U		F
7440-22-4	Silver_	0.74	U		P
7440-23-5	Sodium_	664.00	B	E	P
7440-28-0	Thallium_	0.74	U		F
7440-62-2	Vanadium_	6.40	B		P
7440-66-6	Zinc_	27.60		E	P
	Cyanide_				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80648

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000304

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351007

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3130.00			P
7440-36-0	Antimony	7.10	U		P
7440-38-2	Arsenic	1.10	B	N	F
7440-39-3	Barium	22.10	B		P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	1.30	U		P
7440-70-2	Calcium	711.00	B		P
7440-47-3	Chromium	3.50			P
7440-48-4	Cobalt	1.30	U		P
7440-50-8	Copper	4.30	B		P
7439-89-6	Iron	2670.00			P
7439-92-1	Lead	20.20		S	F
7439-95-4	Magnesium	454.00	B		P
7439-96-5	Manganese	33.50			P
7439-97-6	Mercury	0.13	U	*	CV
7440-02-0	Nickel	4.80	U		P
7440-09-7	Potassium	285.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.76	U		P
7440-23-5	Sodium	747.00	B	E	P
7440-28-0	Thallium	0.76	U		F
7440-62-2	Vanadium	7.10	B		P
7440-66-6	Zinc	16.20		E	P
	Cyanide				NR

Color Before: BLACK

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80649

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000305

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: 619A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 9403E1008

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 78.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	5440.00			P
7440-36-0	Antimony_	7.10	U		P
7440-38-2	Arsenic_	1.80	B	N	F
7440-39-3	Barium_	48.00	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium_	1.30	U		P
7440-70-2	Calcium_	651.00	B		P
7440-47-3	Chromium_	6.50			P
7440-48-4	Cobalt_	7.00	B		P
7440-50-8	Copper_	3.50	B		P
7439-89-6	Iron_	5290.00			P
7439-92-1	Lead_	18.50			F
7439-95-4	Magnesium	795.00	B		P
7439-96-5	Manganese	168.00			P
7439-97-6	Mercury_	0.13	U	*	CV
7440-02-0	Nickel_	4.80	U		P
7440-09-7	Potassium	284.00	U		P
7782-49-2	Selenium_	0.25	U		F
7440-22-4	Silver_	0.76	U		P
7440-23-5	Sodium_	1050.00	B	E	P
7440-28-0	Thallium_	0.76	U		F
7440-62-2	Vanadium_	16.10			P
7440-66-6	Zinc_	14.70		E	P
	Cyanide_				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80650

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 7-MAR-1994 Customer: KING, INC. Job Name: 194-03.56

Samples

Order Labcat ID	56-001	56-002	56-003	56-004	56-005	56-006
Sampling Point	QA QC	X	QA QC	QA QC	X	X
Date Sampled	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994
Customer ID	LAB BLANK	5194000401	5194000401	5194000401	5194000402	5194000403
	NA	NA	DE	MS	NA	NA

Parameters

Units

Total Organic Halogens (Solid)	mg/kg	56-001	56-002	56-003	56-004	56-005	56-006
Analyst: ELL		<20.0	<23.0	<23.0	110 *	<24.0	<33.0
Date/Time: 03/08/94 10:00							
Dilution: 1.0							

Total Pet. Hydrocarbons (Solid)	mg/kg	56-001	56-002	56-003	56-004	56-005	56-006
Analyst: ELL/SJB		<25.0	<23.0	<28.0	90.0 *	<31.0	57.0
Date/Time: 03/09/94 14:00							
Dilution: 1.0							

* - * Recovery
 NR - Not Required
 NA - Not Applicable

80651

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-066
 Sample Name : H94-03.56-002
 Project No. : S19A
 Percent Moisture : 15 %
 Client ID : S19A0004 01

Work Order : H94-03.56
 Date Collected : 04-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 16:26 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.39	0.39	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.5	5.5	U
72-54-8	4,4'-DDD	2.0	2.0	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.7	4.7	U
60-57-1	DIELDRIN	0.78	0.78	U
959-98-8	ENDOSULFAN I	7.8	7.8	U
33213-65-9	ENDOSULFAN II	7.8	7.8	U
1031-07-8	ENDOSULFAN SULFATE	3.9	3.9	U
72-20-8	ENDRIN	2.4	2.4	U
7421-93-4	ENDRIN ALDEHYDE	3.9	3.9	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1074-57-8	HEPTACHLOR EPOXIDE	2.0	2.0	U
72-43-5	METHOXYCHLOR	20	20	U
8001-35-2	TOXAPHENE	94	94	U
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR-1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
53469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097-69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80652

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-065
 Sample Name : H94-03.56-005
 Project No. : S19A
 Percent Moisture : 20 %
 Client ID : S19A0004 02

Work Order : H94-03.56
 Date Collected : 04-MAR 1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJA

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 15:40 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAHNA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	5.9	5.9	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.84	0.84	U
959-98-8	ENDOSULFAN I	8.4	8.4	U
33213-65-9	ENDOSULFAN II	8.4	8.4	U
1031-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80653

INST ID: 4020

CHESTER DC # ---- 8
SAMPLE NUMBER: S19A000401

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
NORTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305602A

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03056V02A

DILUTION FACTOR: 1.20

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010 CHLOROMETHANE	12 U	
C015 BROMOMETHANE	12 U	
C020 VINYL CHLORIDE	12 U	
C025 CHLOROETHANE	12 U	
C030 METHYLENE CHLORIDE	6 U	
C035 ACETONE	12 U	
C040 CARBON DISULFIDE	6 U	
C045 1,1-DICHLOROETHENE	6 U	
C050 1,1-DICHLOROETHANE	6 U	
C055 1,2-DICHLOROETHENE (TOTAL)	6 U	
C060 CHLOROFORM	6 U	
C065 1,2-DICHLOROETHANE	6 U	
C110 2-BUTANONE	12 U	
C115 1,1,1-TRICHLOROETHANE	6 U	
C120 CARBON TETRACHLORIDE	6 U	
C125 VINYL ACETATE	12 U	
C130 BROMODICHLOROMETHANE	6 U	
C140 1,2-DICHLOROPROPANE	6 U	
C145 C15-1,3-DICHLOROPROPENE	6 U	
C150 TRICHLOROETHENE	6 U	
C155 DIBROMOCHLOROMETHANE	6 U	
C160 1,1,2-TRICHLOROETHANE	6 U	
C165 BENZENE	6 U	
C172 TRANS-1,3-DICHLOROPROPENE	6 U	
C175 2-CHLOROETHYL VINYLETHER	12 U	
C180 BROMOFORM	6 U	
C205 4-METHYL-2-PENTANONE	12 U	
C210 2-HEXANONE	12 U	
C220 TETRACHLOROETHENE	6 U	
C225 1,1,2,2-TETRACHLOROETHANE	6 U	
C230 TOLUENE	6 U	
C235 CHLOROBENZENE	6 U	
C240 ETHYLBENZENE	6 U	
C245 BTYRENE	6 U	
C250 XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80651

INST ID: 4020

CHESTER DC # 5
SAMPLE NUMBER: 619A000402

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
SOUTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 9403056058

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:..... DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03056V058

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C015	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C055	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C145	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYLETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80655

INST ID: 4020

CHESTER DG # ---- 8
SAMPLE NUMBER: 819A000403

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
PEGGY LAKE
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305606

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RU03056V06

DILUTION FACTOR: 1.60

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
----------	---	-----------------

C010	CHLOROMETHANE	16 U
C015	BROMOMETHANE	16 U
C020	VINYL CHLORIDE	16 U
C025	CHLOROETHANE	16 U
C030	METHYLENE CHLORIDE	8 U
C035	ACETONE	16 U
C040	CARBON DISULFIDE	8 U
C045	1,1-DICHLOROETHENE	8 U
C050	1,1-DICHLOROETHANE	8 U
C053	1,2-DICHLOROETHENE (TOTAL)	8 U
C060	CHLOROFORM	8 U
C065	1,2-DICHLOROETHANE	8 U
C110	2-BUTANONE	16 U
C115	1,1,1-TRICHLOROETHANE	8 U
C120	CARBON TETRACHLORIDE	8 U
C125	VINYL ACETATE	16 U
C130	BROMODICHLOROMETHANE	8 U
C140	1,2-DICHLOROPROPANE	8 U
C145	CIS-1,3-DICHLOROPROPENE	8 U
C150	TRICHLOROETHENE	8 U
C155	DIBROMOCHLOROMETHANE	8 U
C160	1,1,2-TRICHLOROETHANE	8 U
C165	BENZENE	8 U
C172	TRANS-1,3-DICHLOROPROPENE	8 U
C175	2-CHLOROETHYL VINYLETHER	16 U
C180	BROMOFORM	8 U
C205	4-METHYL-2-PENTANONE	16 U
C210	2-HEXANONE	16 U
C220	TETRACHLOROETHENE	8 U
C225	1,1,2,2-TETRACHLOROETHANE	8 U
C230	TOLUENE	8 U
C235	CHLOROBENZENE	8 U
C240	ETHYLBENZENE	8 U
C245	STYRENE	8 U
C250	XYLENES (TOTAL)	8 U

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80656

INST ID: 4020

CHESTER DG # ---- 8
SAMPLE NUMBER: B19A000501

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
MAIN POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940306002

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RU03060V02

DILUTION FACTOR: 1.60

COMPOUND	DETECTION	AMOUNT
	LIMIT (MICROGRAMS / KG)	FOUND
C010 CHLOROMETHANE	16 U	
C015 BROMOMETHANE	16 U	
C020 VINYL CHLORIDE	16 U	
C025 CHLOROETHANE	16 U	
C030 METHYLENE CHLORIDE	8 U	
C035 ACETONE	16	18
C040 CARBON DISULFIDE	8 U	
C045 1,1-DICHLOROETHENE	8 U	
C050 1,1-DICHLOROETHANE	8 U	
C055 1,2-DICHLOROETHENE (TOTAL)	8 U	
C060 CHLOROFORM	8 U	
C065 1,2-DICHLOROETHANE	8 U	
C110 2-BUTANONE	16 U	
C115 1,1,1-TRICHLOROETHANE	8 U	
C120 CARBON TETRACHLORIDE	8 U	
C125 VINYL ACETATE	16 U	
C130 BROMODICHLOROMETHANE	8 U	
C140 1,2-DICHLOROPROPANE	8 U	
C145 C18-1,3-DICHLOROPROPENE	8 U	
C150 TRICHLOROETHENE	8 U	
C155 DIBROMOCHLOROMETHANE	8 U	
C160 1,1,2-TRICHLOROETHANE	8 U	
C165 BENZENE	8 U	
C172 TRANS-1,3-DICHLOROPROPENE	8 U	
C175 2-CHLOROETHYLVINYLETHER	16 U	
C180 BROMOFORM	8 U	
C205 4-METHYL-2-PENTANONE	16 U	
C210 2-HEXANONE	16 U	
C220 TETRACHLOROETHENE	8 U	
C225 1,1,2,2-TETRACHLOROETHANE	8 U	
C230 TOLUENE	8 U	
C235 CHLOROBENZENE	8 U	
C240 ETHYLBENZENE	8 U	
C245 STYRENE	8 U	
C250 XYLENES (TOTAL)	8 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80657

INST ID: 4020

CHESTER DC # ---- B
SAMPLE NUMBER: S19A000502

ORGANIC ANALYSIS DATA SHEET

SAN JACINTO
OFFSHORE
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940306005

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RU03060V05

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C018	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C052	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLORMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C142	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMODICHLORMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYL ETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80658

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-070
 Sample Name : H94-03.56-006
 Project No. : 819A
 Percent Moisture : 39 %
 Client ID : 819A0004 03

Work Order : H94-03.56
 Date Collected : 04-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MTM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 19:32 Dilution Factor : 1.000
 Analyzed by : 8388657

Gas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	2.2	2.2	U
319-84-6	ALPHA-BHC	0.55	0.55	U
319-85-7	BETA-BHC	1.6	1.6	U
319-86-8	DELTA-BHC	1.6	1.6	U
58-89-9	GAMMA-BHC/LINDANE	1.6	1.6	U
57-74-9	CHLORDANE	7.7	7.7	U
72-54-8	4,4'-DDD	2.7	2.7	U
72-55-9	4,4'-DDE	1.6	1.6	U
50-29-3	4,4'-DDT	6.6	6.6	U
60-57-1	DIELDRIN	1.1	1.1	U
959-98-8	ENDOSULFAN I	11	11	U
33213-65-9	ENDOSULFAN II	11	11	U
1031-07-8	ENDOSULFAN SULFATE	5.5	5.5	U
72-20-8	ENDRIN	3.3	3.3	U
7421-93-4	ENDRIN ALDEHYDE	5.5	5.5	U
76-44-8	HEPTACHLOR	1.6	1.6	U
1024-57-3	HEPTACHLOR EPOXIDE	2.7	2.7	U
72-43-5	METHOXYCHLOR	27	27	U
8001-35-2	TOXAPHENE	130	130	U
12674-11-2	AROCLOR-1016	27	27	U
11104-28-2	AROCLOR-1221	27	27	U
11141-16-5	AROCLOR-1232	27	27	U
63469-21-9	AROCLOR-1242	27	27	U
12672-29-6	AROCLOR-1248	27	27	U
11097-69-1	AROCLOR 1254	27	27	U
11096-82-5	AROCLOR-1260	27	27	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80659

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000403

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940356006

Level (low/med): LOW

Date Received: 03/07/94

% Solids: 60.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13000.00			P
7440-36-0	Antimony	9.30	U		P
7440-38-2	Arsenic	9.70		+	F
7440-39-3	Barium	194.00			P
7440-41-7	Beryllium	1.10	B		P
7440-43-9	Cadmium	1.70	U		P
7440-70-2	Calcium	8130.00		E	P
7440-47-3	Chromium	25.70			P
7440-48-4	Cobalt	9.20	B		P
7440-50-8	Copper	17.60			P
7439-89-6	Iron	16800.00			P
7439-92-1	Lead	45.60		N	F
7439-95-4	Magnesium	5520.00		E	P
7439-96-5	Manganese	1280.00			P
7439-97-6	Mercury	0.33			CV
7440-02-0	Nickel	18.00			P
7440-09-7	Potassium	2670.00			P
7782-49-2	Selenium	0.33	U		F
7440-22-4	Silver	0.99	U		P
7440-23-5	Sodium	6090.00			P
7440-28-0	Thallium	0.99	U		F
7440-62-2	Vanadium	25.10			P
7440-66-6	Zinc	87.80			P
	Cyanide				NR

Color Before: GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

00660

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 6-MAR-1994 Customer: FMIG, INC. Job name: H94-03.60

	Samples				
Chester LabNet ID	60-001	60-002	60-003	60-004	60-005
Sampling Point	QA QC	X	QA QC	QA QC	X
Date Sampled	7-MAR-1994	7-MAR-1994	7-MAR-1994	7-MAR-1994	7-MAR-1994
Customer ID	LAB BLANK	S19A000501	S19A000501	S19A000501	S19A000502
	NA	NA	DP	MS	NA

Parameters	Units					
Total Organic Halogens (Solid)	mg/Kg	<20.0	<32.0	<32.0	103 *	<24.0
Analyst: RNS						
Date/Time: 03/08/94 14:00						
Dilution: 1.0						
Total Pet. Hydrocarbons (Solid)	mg/Kg	<25.0	<40.0	<39.0	103 *	<31.0
Analyst: ELL/JOB						
Date/Time: 03/09/94 15:30						
Dilution: 1.0						

* - % Recovery
 NR - Not Required
 NA - Not Applicable

080661

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-077
 Sample Name : H94-03.60-002
 Project No. : S19A
 Percent Moisture : 39 %
 Client ID : S19A0005 01

Work Order : H94-03.60
 Date Collected : 07-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 10-MAR-1994 00:58 Dilution Factor : 1.000
 Analyzed by : 6388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	2.2	2.2	U
319-84-6	ALPHA-BHC	0.55	0.55	U
319-85-7	BETA-BHC	1.6	1.6	U
319-86-8	DELTA-BHC	1.6	1.6	U
58-89-9	GAMMA-BHC/LINDANE	1.6	1.6	U
57-74-9	CHLORDANE	7.6	7.6	U
72-54-8	4,4'-DDD	2.7	2.7	U
72-55-9	4,4'-DDE	1.6	1.6	U
50-29-3	4,4'-DDT	6.6	6.6	U
60-57-1	DIELDRIN	1.1	1.1	U
959-98-8	ENDOSULFAN I	11	11	U
33213-65-9	ENDOSULFAN II	11	11	U
1031-07-8	ENDOSULFAN SULFATE	5.5	5.5	U
72-20-8	ENDRIN	3.3	3.3	U
7421-93-4	ENDRIN ALDEHYDE	5.5	5.5	U
76-44-8	HEPTACHLOR	1.6	1.6	U
1024-57-3	HEPTACHLOR EPOXIDE	2.7	2.7	U
72-43-5	METHOXYCHLOR	27	27	U
8001-35-2	TOXAPHENE	130	130	U
12674-11-2	AROCLOR-1016	27	27	U
11104-28-2	AROCLOR-1221	27	27	U
11141-16-5	AROCLOR-1232	27	27	U
53469-21-9	AROCLOR-1242	27	27	U
12672-29-6	AROCLOR-1248	27	27	U
11097-69-1	AROCLOR-1254	27	27	U
11096-82-5	AROCLOR-1260	27	27	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80662

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-076
 Sample Name : H94-03.60-005
 Project No. : S19A
 Percent Moisture : 14 %
 Client ID : S19A0005 02

Work Order : H94-03.60
 Date Collected : 07-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 10-MAR-1994 00:11 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.39	0.39	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.4	5.4	U
72-54-8	4,4'-DDD	1.9	1.9	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.7	4.7	U
60-57-1	DIELDRIN	0.78	0.78	U
959-98-8	ENDOSULFAN I	7.8	7.8	U
33213-65-9	ENDOSULFAN II	7.8	7.8	U
1031-07-8	ENDOSULFAN SULFATE	3.9	3.9	U
72-20-8	ENDRIN	2.3	2.3	U
7421-93-4	ENDRIN ALDEHYDE	3.9	3.9	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	1.0	1.0	U
72-43-5	METHOXYCHLOR	19	19	U
8001-35-2	TOXAPHENE	93	93	U
12674-11-2	AROCLOR-1016	19	19	U
11104-28-2	AROCLOR-1221	19	19	U
11141-16-5	AROCLOR-1232	19	19	U
53469-21-9	AROCLOR-1242	19	19	U
12672-29-6	AROCLOR-1248	19	19	U
11007-60-1	AROCLOR-1254	19	19	U
11096-82-5	AROCLOR-1260	19	19	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80663

U.S. EPA - CLP

To: JIM T
1 of 31
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000501

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940360002

Level (low/med): LOW

Date Received: 03/07/94

% Solids: 64.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10800.00			P
7440-36-0	Antimony	8.70	U		P
7440-38-2	Arsenic	9.20		+N	F
7440-39-3	Barium	101.00			P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium	1.60	U		P
7440-70-2	Calcium	7530.00			P
7440-47-3	Chromium	15.20			P
7440-48-4	Cobalt	7.10	B		P
7440-50-8	Copper	10.30			P
7439-89-6	Iron	16600.00			P
7439-92-1	Lead	43.50			F
7439-95-4	Magnesium	3660.00			P
7439-96-5	Manganese	197.00			P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	10.70	B		P
7440-09-7	Potassium	2340.00			P
7782-49-2	Selenium	0.43	B		F
7440-22-4	Silver	0.93	U	N	P
7440-23-5	Sodium	3420.00			P
7440-28-0	Thallium	1.60	U	WN	F
7440-62-2	Vanadium	23.20			P
7440-66-6	Zinc	41.20		E	P
	Cyanide				NR

Color Before: GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80664

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000502

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: 612A

CAS No.:

SDS No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940360005

Level (low/mod): LOW

Date Received: 03/07/94

Solids: 62.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	347.00			P
7440-36-0	Antimony	6.80	U		P
7440-38-2	Arsenic	0.97	U	N	P
7440-39-3	Barium	10.60	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	195.00	B		P
7440-47-3	Chromium	0.97	U		P
7440-48-4	Cobalt	1.20	U		P
7440-50-8	Copper	1.20	U		P
7439-89-6	Iron	428.00			P
7439-92-1	Lead	1.20		W	P
7439-95-4	Magnesium	132.00	B		P
7439-96-5	Manganese	0.00			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	4.60	U		P
7440-09-7	Potassium	271.00	U		P
7782-49-2	Selenium	0.24	U		P
7440-22-4	Silver	0.72	U	N	P
7440-23-5	Sodium	254.00	B		P
7440-28-0	Thallium	0.24	U	WN	P
7440-62-2	Vanadium	0.97	U		P
7440-66-6	Zinc	2.70	B	E	P
	Cyanide				NR

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

FORM I - IN

000004

3/70

80665

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 7-MAR-1994

Customer: EMI, INC.

Job name: H94-03.55

Parameters	Units	Samples		
		55-001	55-002	55-003
Character: LIXXET ID		CA GC	X	X
Sampling Point		4-MAR-1994	4-MAR-1994	5-MAR-1994
Date Sampled		1AB BLANK	S190000301	S190000302
Customer ID		NR	NR	NR
			BW WATER COMP	SJ WATER COMP
Ammia Nitrogen as N	mg/L	<0.10	0.11	0.11
Analyst: BSV Date/Time: 03/08/94 13:36 Dilution: 1.0				
Nitrate	mg/L	<0.05	<0.05	<0.05
Analyst: BSV Date/Time: 03/10/94 11:00 Dilution: 1.0				
Orthophosphate Phosphorus	mg/L	<0.01	<0.01	<0.01
Analyst: JCB Date/Time: 03/07/94 12:00 Dilution: 1.0				
Total Organic Halogens	mg/L	<0.005	0.20	0.20
Analyst: RNS Date/Time: 03/09/94 09:00 Dilution: 1.0				
Total Tot. Hydrocarbons	mg/L	<0.50	<0.51	<0.52
Analyst: ELL/JCB Date/Time: 03/08/94 13:00 Dilution: 1.0				

* - % Recovery

NR - Not Required

NA - Not Applicable

80666

KEYSTONE DC # ---- 8

INST ID: 51EF

SAMPLE NUMBER: 819C000301

ORGANICS ANALYSIS DATA SHEET

BROWNWOOD
MIDDLE POND
WATER

LABORATORY NAME: CHESTER LABNET ENV.

CASE NO.: ---

LAB SAMPLE ID NO.: 940305502

GC REPORT NO.:

SAMPLE MATRIX: WATER

CONTRACT NO.: --

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATAFILE: 8U03055V02

DATE ANALYZED: 03/09/94

DILUTION FACTOR: 1.00

COMPOUND	DETECTION LIMIT (MICROGRAMS / LITER)	AMOUNT FOUND
----------	--	-----------------

0010	CHLOROMETHANE	10 U	
0015	BROMOMETHANE	10 U	
0020	VINYL CHLORIDE	10 U	
0025	CHLOROETHANE	10 U	
0030	METHYLENE CHLORIDE	5 U	
0035	ACETONE	10	6 J
0040	CARBON DISULFIDE	5 U	
0045	1,1-DICHLOROETHENE	5 U	
0050	1,1-DICHLOROETHANE	5 U	
0055	1,2-DICHLOROETHENE (TOTAL)	5 U	
0060	CHLOROFORM	5 U	
0065	1,2-DICHLOROETHANE	5 U	
0110	2-BUTANONE	10 U	
0115	1,1,1-TRICHLOROETHANE	5 U	
0120	CARBON TETRACHLORIDE	5 U	
0125	VINYL ACETATE	10 U	
0130	BROMODICHLOROMETHANE	10 U	
0140	1,2-DICHLOROPROPANE	5 U	
0145	CIS-1,3-DICHLOROPROPENE	5 U	
0150	TRICHLOROETHENE	5 U	
0155	DIBROMODICHLOROMETHANE	5 U	
0160	1,1,2-TRICHLOROETHANE	5 U	
0165	BENZENE	5 U	
0172	TRANS-1,3-DICHLOROPROPENE	5 U	
0175	2-CHLOROETHYL VINYL ETHER	10 U	
0180	BROMOFORM	5 U	
0205	4-METHYL-2-PENTANONE	10 U	
0210	2-HEXANONE	10 U	
0220	TETRACHLOROETHENE	5 U	
0225	1,1,2,2-TETRACHLOROETHANE	5 U	
0230	TOLUENE	5 U	
0235	CHLOROBENZENE	5 U	
0240	ETHYLBENZENE	5 U	
0245	STYRENE	5 U	
0250	XYLENES (TOTAL)	5 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80667

INST ID: BIEF

KEYSTONE DC # ---- 8

SAMPLE NUMBER: 6140000302

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
MAIN POND
WATER

LABORATORY NAME: CHESTER LABNET ENV.

CASE NO.: ---

LAB SAMPLE ID NO.: 940305503

GC REPORT NO.:

SAMPLE MATRIX: WATER

CONTRACT NO.: --

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATAFILE: 500305503Z

DATE ANALYZED: 03/09/94

DILUTION FACTOR: 1.00

COMPOUND	DETECTION LIMIT (MICROGRAMS / LITER)	AMOUNT FOUND
C010 CHLOROMETHANE	10 U	
C015 BROMOMETHANE	10 U	
C020 VINYL CHLORIDE	10 U	
C025 CHLOROETHANE	10 U	
C030 METHYLENE CHLORIDE	5 U	
C035 ACETONE	10	6 J
C040 CARBON DISULFIDE	5 U	
C045 1,1-DICHLOROETHENE	5 U	
C050 1,1-DICHLOROETHANE	5 U	
C053 1-2-DICHLOROETHENE (TOTAL)	5 U	
C060 CHLOROFORM	5 U	
C065 1,2-DICHLOROETHANE	5 U	
C110 2-BUTANONE	10 U	
C115 1,1,1-TRICHLOROETHANE	5 U	
C120 CARBON TETRACHLORIDE	5 U	
C125 VINYL ACETATE	10 U	
C130 BROMODICHLOROMETHANE	10 U	
C140 1,2-DICHLOROPROPANE	5 U	
C143 C18-1,3-DICHLOROPROPENE	5 U	
C150 TRICHLOROETHENE	5 U	
C155 DIBROMOCHLOROMETHANE	5 U	
C160 1,1,2-TRICHLOROETHANE	5 U	
C165 BENZENE	5 U	
C172 TRANS-1,3-DICHLOROPROPENE	5 U	
C175 2-CHLOROETHYL VINYLETHER	10 U	
C180 BROMOFORM	5 U	
C205 4-METHYL-2-PENTANONE	10 U	
C210 2-HEXANONE	10 U	
C220 TETRACHLOROETHENE	5 U	
C225 1,1,2,2-TETRACHLOROETHANE	5 U	
C230 TOLUENE	5 U	
C235 CHLOROBENZENE	5 U	
C240 ETHYLBENZENE	5 U	
C245 STYRENE	5 U	
C250 XYLENES (TOTAL)	5 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

080668

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBPO307-057
 Sample Name : H94-03.55-002
 Project No. : S19C
 Client ID : S19C0003 01

Work Order : H94-03.55
 Date Collected : 04-MAR-1994
 Matrix : WATER
 Date Received : 07-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : NJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 09:27 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/l	
309-00-2	ALDRIN	0.040	0.040	U
319-84-6	ALPHA-BHC	0.010	0.010	U
319-85-7	BETA-BHC	0.030	0.030	U
319-86-8	DELTA-BHC	0.030	0.030	U
58-89-9	GAHMA-BHC/LINDANE	0.030	0.030	U
57-74-9	CHLORDANE	0.14	0.14	U
72-54-8	4,4'-DDD	0.050	0.050	U
72-55-9	4,4'-DDE	0.030	0.030	U
50-29-3	4,4'-DDT	0.12	0.12	U
60-57-1	DIELDRIN	0.020	0.020	U
959-98-8	ENDOSULFAN I	0.20	0.20	U
33213-65-9	ENDOSULFAN II	0.20	0.20	U
1031-07-8	ENDOSULFAN SULFATE	0.10	0.10	U
72-20-8	ENDRIN	0.060	0.060	U
7421-93-4	ENDRIN ALDEHYDE	0.10	0.10	U
76-44-8	HEPTACHLOR	0.030	0.030	U
1024-57-3	HEPTACHLOR EPOXIDE	0.050	0.050	U
72-43-5	METHOXYCHLOR	0.50	0.50	U
8001-35-2	TOXAPHENE	2.4	2.4	U
12674-11-2	AROCLOR-1016	0.50	0.50	U
11104-28-2	AROCLOR-1221	0.50	0.50	U
11141-16-5	AROCLOR-1232	0.50	0.50	U
53469-21-9	AROCLOR-1242	0.50	0.50	U
12672-29-6	AROCLOR-1248	0.50	0.50	U
11097-69-1	AROCLOR-1254	0.50	0.50	U
11096-82-5	AROCLOR-1260	0.50	0.50	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80669

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBP0307-056
 Sample Name : H94-03.55-003
 Project No. : S19C
 Client ID : S19C0003 02

Work Order : H94-03.55
 Date Collected : 05-MAR-1994
 Matrix : WATER
 Date Received : 07-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : MJN

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 08:40 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/l	
309-00-2	ALDRIN	0.040	0.040	U
319-84-6	ALPHA-BHC	0.010	0.010	U
319-85-7	BETA-BHC	0.030	0.030	U
319-86-8	DELTA-BHC	0.030	0.030	U
58-89-9	GAMMA-BHC/LINDANE	0.030	0.030	U
57-74-9	CHLORDANE	0.14	0.14	U
72-54-8	4,4'-DDD	0.050	0.050	U
72-55-9	4,4'-DDE	0.030	0.030	U
50-29-3	4,4'-DDT	0.12	0.12	U
60-57-1	DIELDRIN	0.020	0.020	U
959-98-8	ENDOSULFAN I	0.20	0.20	U
33213-65-9	ENDOSULFAN II	0.20	0.20	U
1031-07-8	ENDOSULFAN SULFATE	0.10	0.10	U
72-20-8	ENDRIN	0.060	0.060	U
7421-93-4	ENDRIN ALDEHYDE	0.10	0.10	U
76-44-8	HEPTACHLOR	0.030	0.030	U
1024-57-3	HEPTACHLOR EPOXIDE	0.050	0.050	U
72-43-5	METHOXYCHLOR	0.50	0.50	U
8001-35-2	TOXAPHENE	2.4	2.4	U
12674-11-2	AROCLOR-1016	0.50	0.50	U
11104-28-2	AROCLOR-1221	0.50	0.50	U
11141-16-5	AROCLOR-1232	0.50	0.50	U
53469-21-9	AROCLOR-1242	0.50	0.50	U
12672-29-6	AROCLOR-1248	0.50	0.50	U
11097-69-1	AROCLOR-1254	0.50	0.50	U
11096-82-5	AROCLOR-1260	0.50	0.50	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80670

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 7-MAR-1994 Customer: FINEG, INC. Job name: H94-03.54

	Samples					
Chester LabNet ID	54-001	54-002	54-003	54-004	54-005	54-006
Sampling Point	QA QC	X	QA QC	QA QC	X	X
Date Sampled	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994
Customer ID	LAB BLANK	S19F000101	S19F000101	S19F000101	S19F000102	S19F000103
	NA	NA	DUP	MS	NA	NA

Parameters	Units						
Ammonia Nitrogen as N	mg/L	<0.10	<0.10	<0.10	99.0 *	<0.10	<0.10
Analyst: SGV							
Date/Time: 03/08/94 13:36							
Dilution: 1.0							
Nitrate	mg/L	<0.05	<0.05	<0.05	93.0 *	<0.05	<0.05
Analyst: SGV							
Date/Time: 03/10/94 11:00							
Dilution: 1.0							
Orthophosphate Phosphorous	mg/L	<0.01	<0.01	<0.01	100 *	<0.01	<0.01
Analyst: JCB							
Date/Time: 03/07/94 12:00							
Dilution: 1.0							

* - % Recovery

NR - Not Required

NA - Not Applicable

80671

11-MAR-1994

Page 2

Summary of Analytical Results

Data received: 7-MAR-1994

Customer: FINEG, INC.

Job name: H94-03.54

	Samples				
Chester LabNet ID	54-007	54-008	54-009	54-010	54-011
Sampling Point	X	X	X	X	X
Date Sampled	4-MAR-1994	5-MAR-1994	5-MAR-1994	5-MAR-1994	5-MAR-1994
Customer ID	SL9F000104	SL9F000105	SL9F000106	SL9F000107	SL9F000108
	NA	NA	NA	NA	NA

Parameters	Units					
Ammonia Nitrogen as N	mg/L	<0.10	<0.10	<0.10	<0.10	0.10
Analyst: EGV						
Date/Time: 03/08/94 13:36						
Dilution: 1.0						
Nitrate	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Analyst: EGV						
Date/Time: 03/10/94 11:00						
Dilution: 1.0						
Orthophosphate Phosphorus	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Analyst: JCB						
Date/Time: 03/07/94 12:00						
Dilution: 1.0						

* - % Recovery

NR - Not Required

NA - Not Applicable

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**FRENCH LIMITED PROJECT
WETLAND HYDROLOGY EVALUATION
SAN JACINTO SITE**

FINAL REPORT

Prepared for:

**FLTG, Incorporated
Crosby, Texas**

Prepared by:

**APPLIED HYDROLOGY ASSOCIATES, INC.
Denver, Colorado**

April, 1994

FRENCH LIMITED PROJECT
WETLAND HYDROLOGY EVALUATION
SAN JACINTO SITE

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APPENDICES

Appendix A Laboratory Analytical Reports

1.0 INTRODUCTION

Applied Hydrology Associates, Inc. (AHA) developed and implemented a scope of work to obtain water, soil and sediment samples and perform hydrologic evaluations for the following potential wetland development site adjacent to the San Jacinto estuary:

The San Jacinto Site, a former marshy area at the San Jacinto Battlefield Monument Site that is currently flooded due to subsidence below sea level.

Field work for this project was performed by G&F Technical Services, Inc. (G&F), and coordinated and supervised by Jim Thomson and Art O'Hayre of AHA. The project was initiated with a site meeting with Crouch Environmental on February 25, 1994. Field work was conducted between March 2, 1994 and March 9, 1994. Field-generated data and laboratory analytical results were communicated to project members as received, and were complete by March 14, 1994.

The scope of work is described in Section 2.0. Results are presented in Section 3.0. Laboratory analytical reports are included in Appendix A.

2.0 SCOPE OF WORK

The work performed consisted of the following tasks:

- (1) Perform depth sounding profiles of inshore waters
- (2) Sample inshore waters for salinity, dissolved oxygen, nutrients, and pollutants
- (3) Sample inshore sediments for pollutants
- (4) Sample shallow soils for pollutants
- (5) Drill shallow soils to 15 ft, determine the depth of the pre-subsidence ground surface, and assess soil permeabilities
- (6) Perform bathymetric surveying offshore
- (7) Sample offshore sediments for pollutants
- (8) Sample potential fill area (Peggy Lake) for pollutants
- (9) Evaluate channel and cut plans, to determine likely tidal mixing

Results of these tasks are presented in the above sequence in the following sections. Sample locations are presented on aerial photographs provided by Crouch Environmental Services.

3.0 RESULTS

3.1 Lagoon Water Depths

Five depth sounding profiles were completed in the main pond ("Monument Pond") at the San Jacinto site on March 5, 1994. Echo sounding methods (described in Section 3.6) were used. A depth sounding profile was also completed in the Santa Anna Bayou, southeast of Monument Pond and hydraulically connected with it and the offshore waters. Depth profiles were also performed in the "Lost Pond" (possible fresh water pond) to the east of the main pond. Results are described below.

Five depth profiles were obtained in the Monument Pond, as shown in Figure 3-1. The transects were started at #1 about 10:00 am. and completed with #5 at about noon. Water depths were relatively consistent at about 2 feet, except near the shore. The bottom consisted of a soft sediment floc that did not always provide for good depth sounding. Approximately 6 inches to 1 foot of soft sediment occurs over much of the pond. Sounding logs are presented in Figures 3-2 through 3-4.

The depth profile in the Santa Anna Bayou was started about 9:30 am starting from the turn-around in the Monument Park located furthest south and east as shown on Figure 3-5. The transect was run heading northwest through the channel. Recorded depths ranged from 1 to 2 feet, as shown on Figures 3-6 and 3-7.

Three depth profiles were obtained in the Lost Pond on March 8. Access was very difficult and required cutting a trail through thick vegetation. A sketch of the pond layout showing transect lines is presented in Figure 3-8. Depths ranged from 4.5 feet in the southwest (nearest the main pond) to less than 0.5 ft in the northeast (furthest from the main pond), as shown in Figures 3-9 and 3-10. As for the main pond, the bottom was very soft sediment which did not yield a "hard" echo response.

Water depths at each water sampling location were also recorded as described in Section 3.2.

3.2 Water Samples

3.2.1 Lagoon Water Samples

Nutrient samples, depths, Secchi disc and field parameters (temperature, specific conductance, pH and dissolved oxygen) were taken at three locations within the Monument Site lagoon, shown on Figure 3-11. Results are provided in Table 3-1.

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Table 3-1
Inshore Waters
Depths, Nutrients and Field Parameters

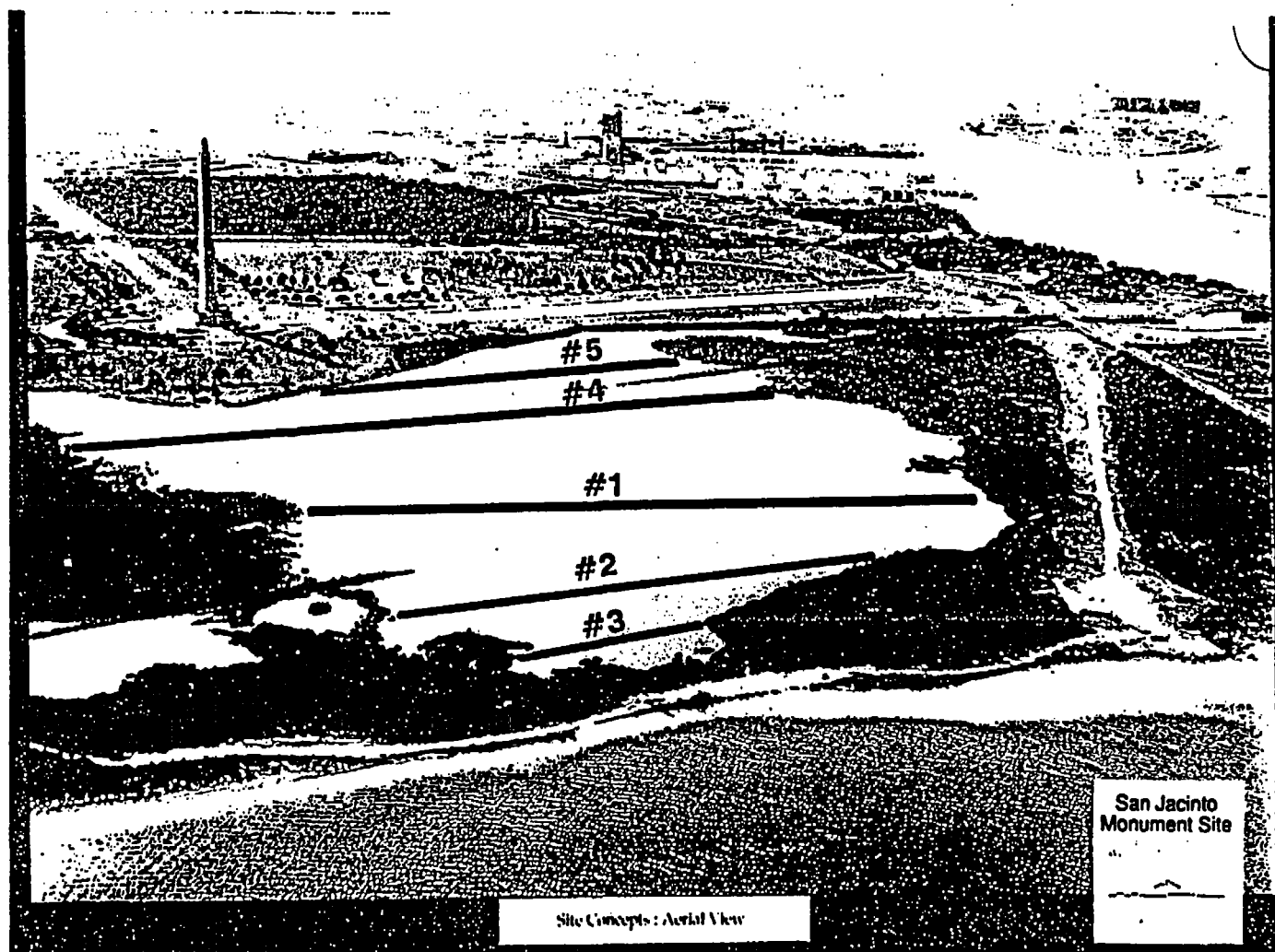
Sample Number	Date	Temp. (deg. F)	pH	Field S.C. (us/cm)	Dissolved Oxygen (mg/l)	NH4 Conc. (mg/l)	Nitrate Conc. (mg/l)	Phosphate Conc. (mg/l)	Water Depth (ft)	Secchi Disc (inches)	Comments
MP-1-S	3/5/94	65.5	8.68	12770	3.2				2.0	8	10:50 am, 0-1 ft
MP-1-D	3/5/94	67.2	8.67	12790	3.8				2.0	8	1- 2 ft
MP-1-C	3/5/94					<0.10	<0.05	<0.01	2.0	8	depth composite
MP-2-S	3/5/94	67.2	8.71	12900	3.8	0.10	<0.05	<0.01	1.5	8	11:10 am; 0-1 ft.
MP-3-S	3/5/94	69.3	8.67	13080	4.0				1.7	8	11:40 am; 0-1 ft
MP-3-D	3/5/94	69.0	8.62	13,030	4.0				1.7	8	11:43 am, depth .5-1.5 ft.
MP-3-C	3/5/94					0.11	<0.05	<0.01	1.7	8	11:45 am, depth composite
LP-1A	3/8/94	75.0	8.70	13,500	5.8					8	
LP-1B	3/8/94	75.3	8.67	13,100	5.8					6	
LP-2A	3/8/94	75.2	8.67	12,800	5.9					9	
LP-2B	3/8/94	74.8	8.61	12,900	5.4					9	
LP-2C	3/8/94	75.2	8.58	12,970	5.9					9	
LP-3A	3/8/94	75.9	8.59	13,140	5.9					6	
LP-3B	3/8/94	75.3	8.52	13,050	5.9					6	

Notes:

MP - Monument Pond

LP - Lost Pond

Figure 3-1



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Figure 3-2

San Jacinto Pond Soundings

Profile 1,2
Time _____
Bearing _____

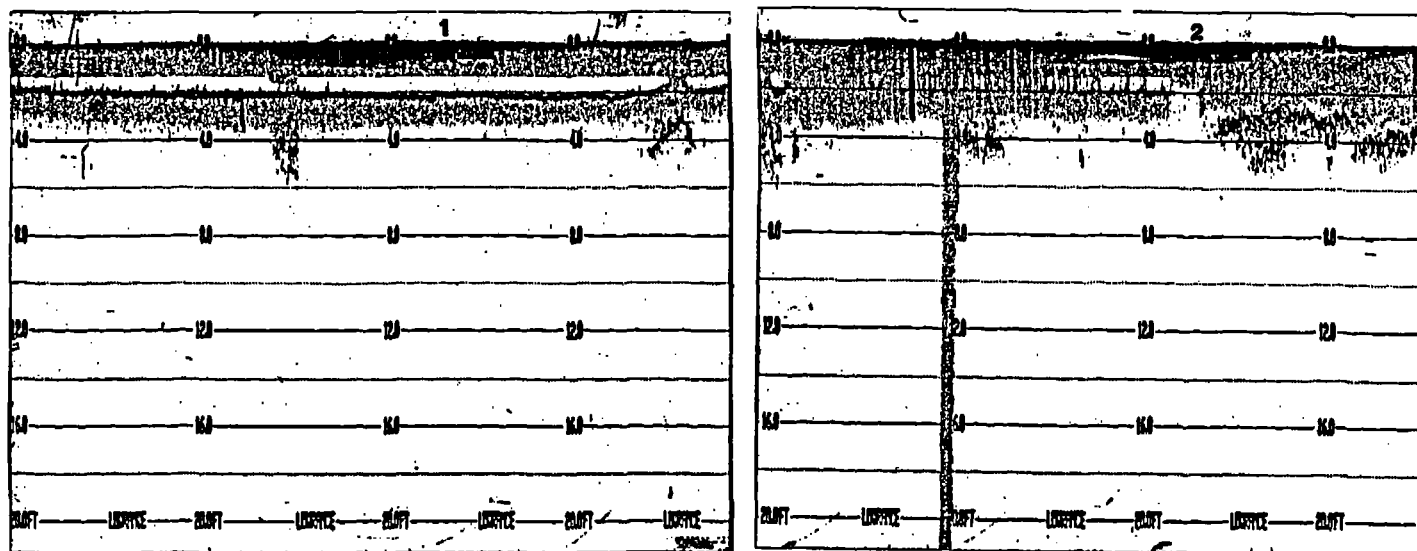
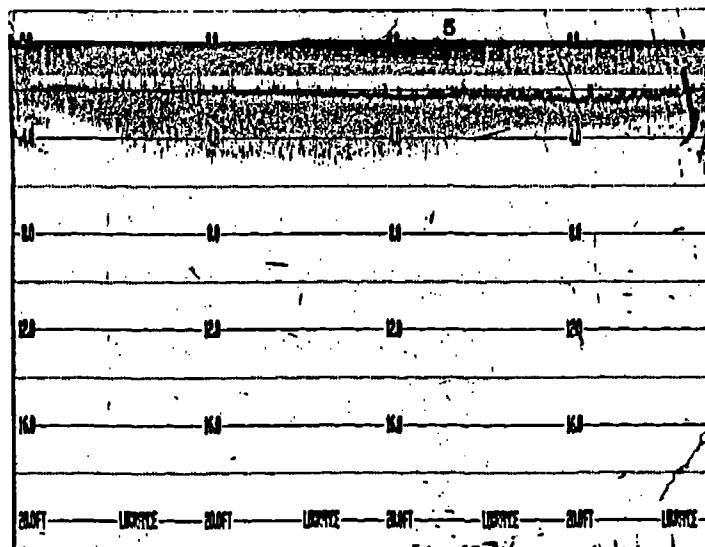
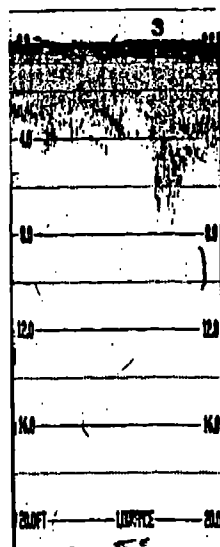


Figure 3-3

San Jacinto Pond Soundings

Profile 3 & 5
Time _____
Bearing _____



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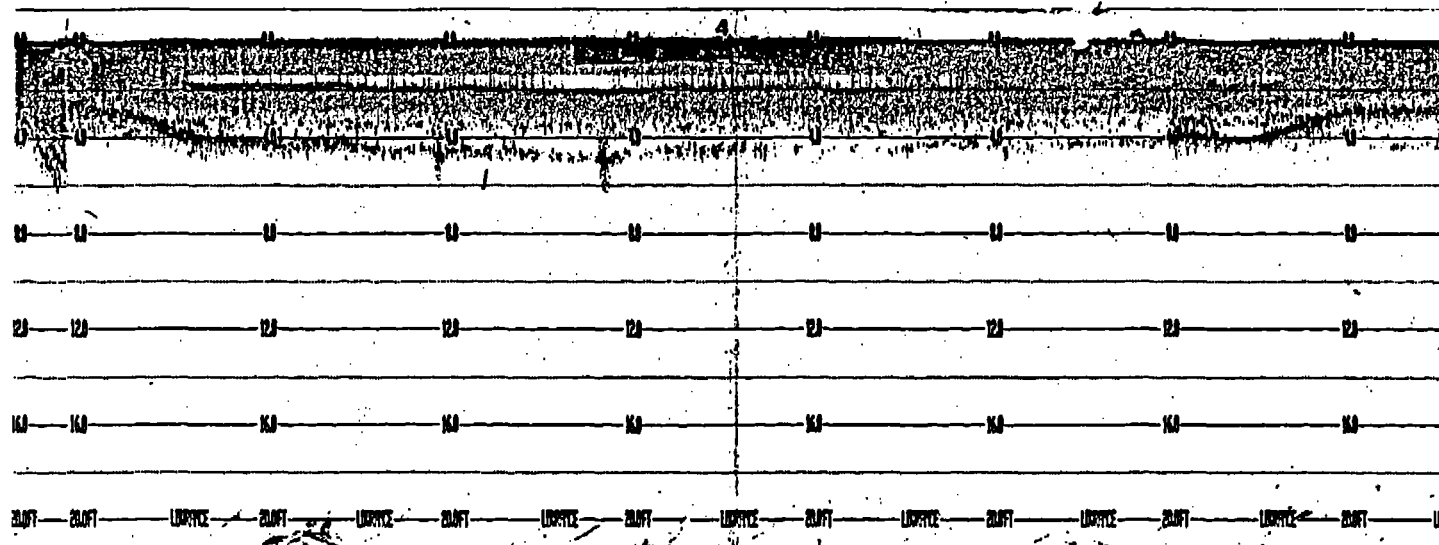
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Figure 3-4

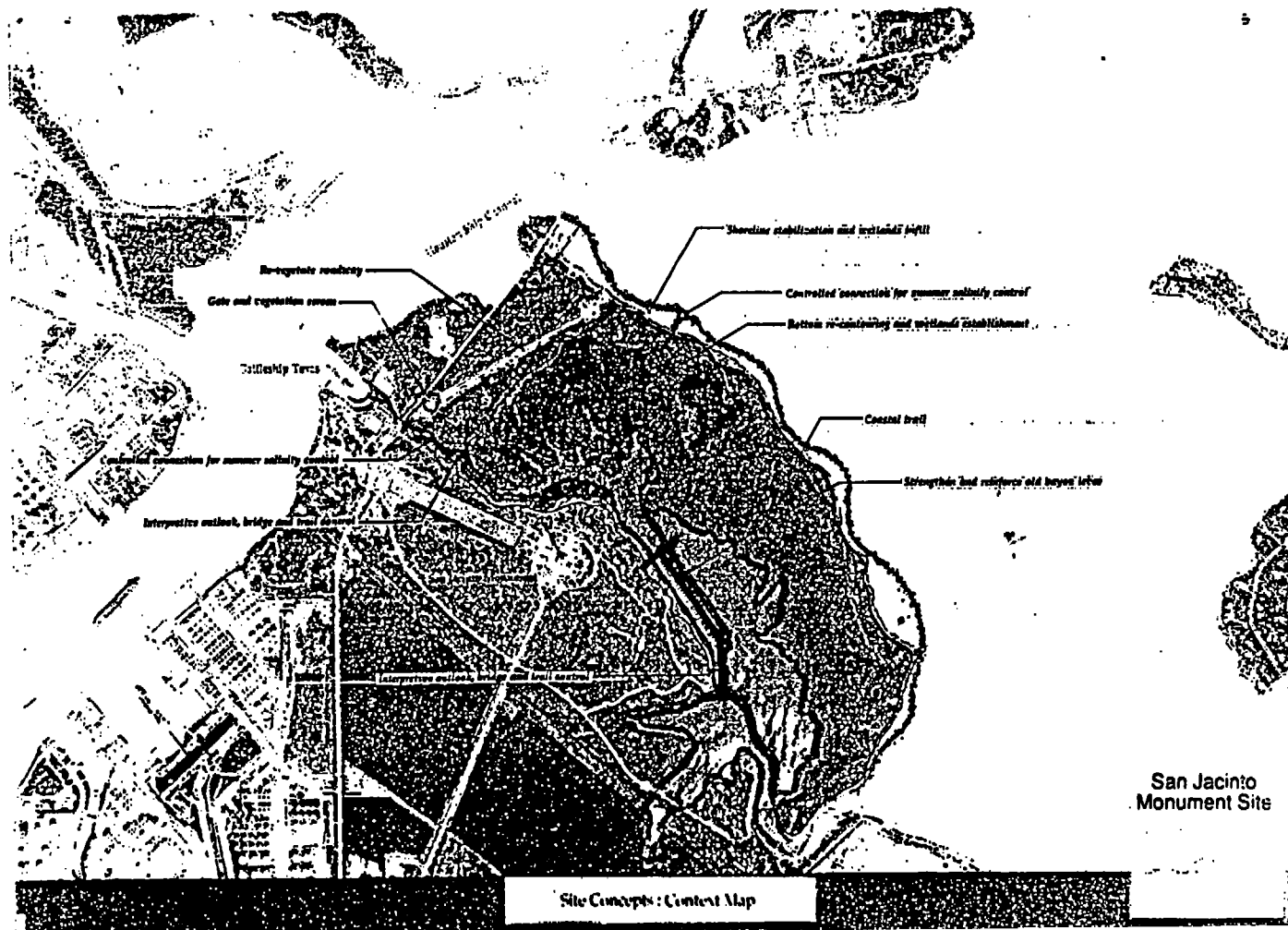
San Jacinto Pond Soundings

Profile 4
Time
Bearing



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Figure 3-5

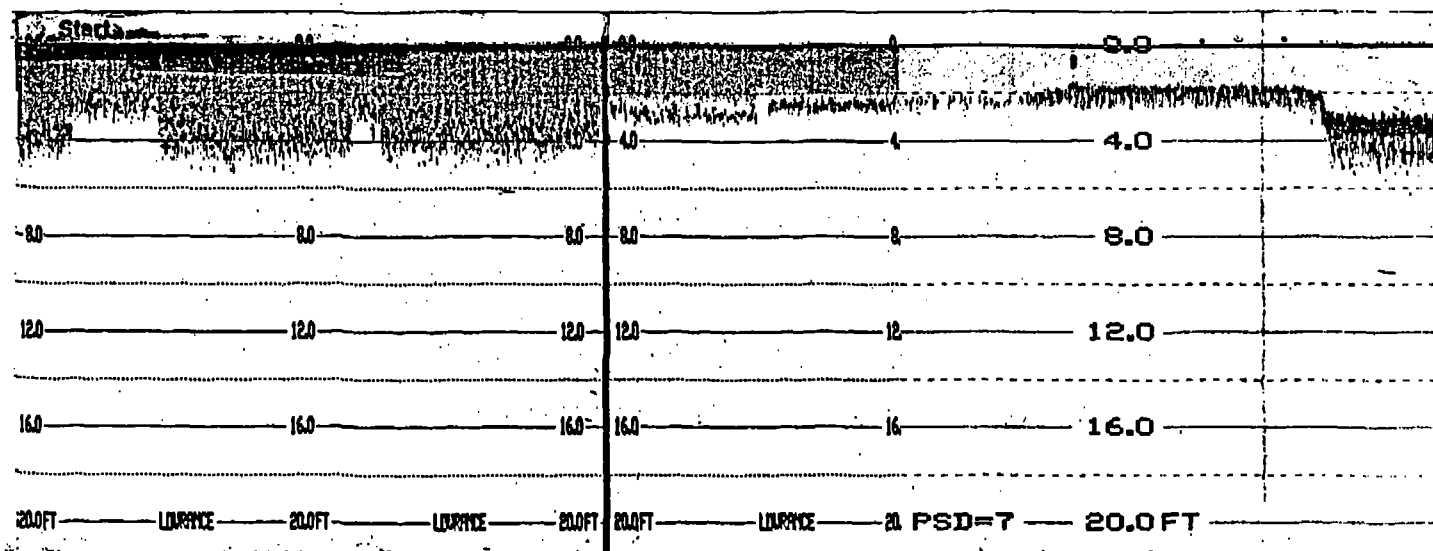


SANTA ANNA BAYOU TRANSECT

Figure 3-6

Santa Anna Bayou Soundings

Profile	<u>Part 1 of 2</u>
Time	<u> </u>
Bearing	<u>SE to NW</u>

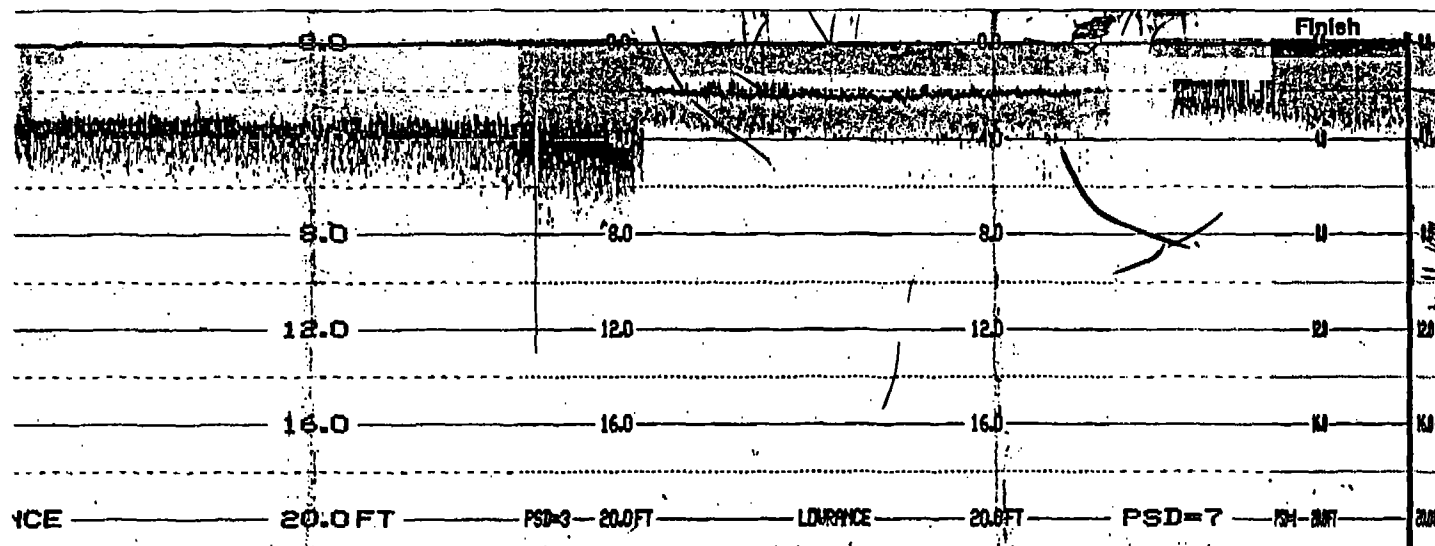


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Figure 3-7

Santa Anna Bayou Soundings

Profile	<u>Part 2 of 2</u>
Time	<u> </u>
Bearing	<u>SE to NW</u>

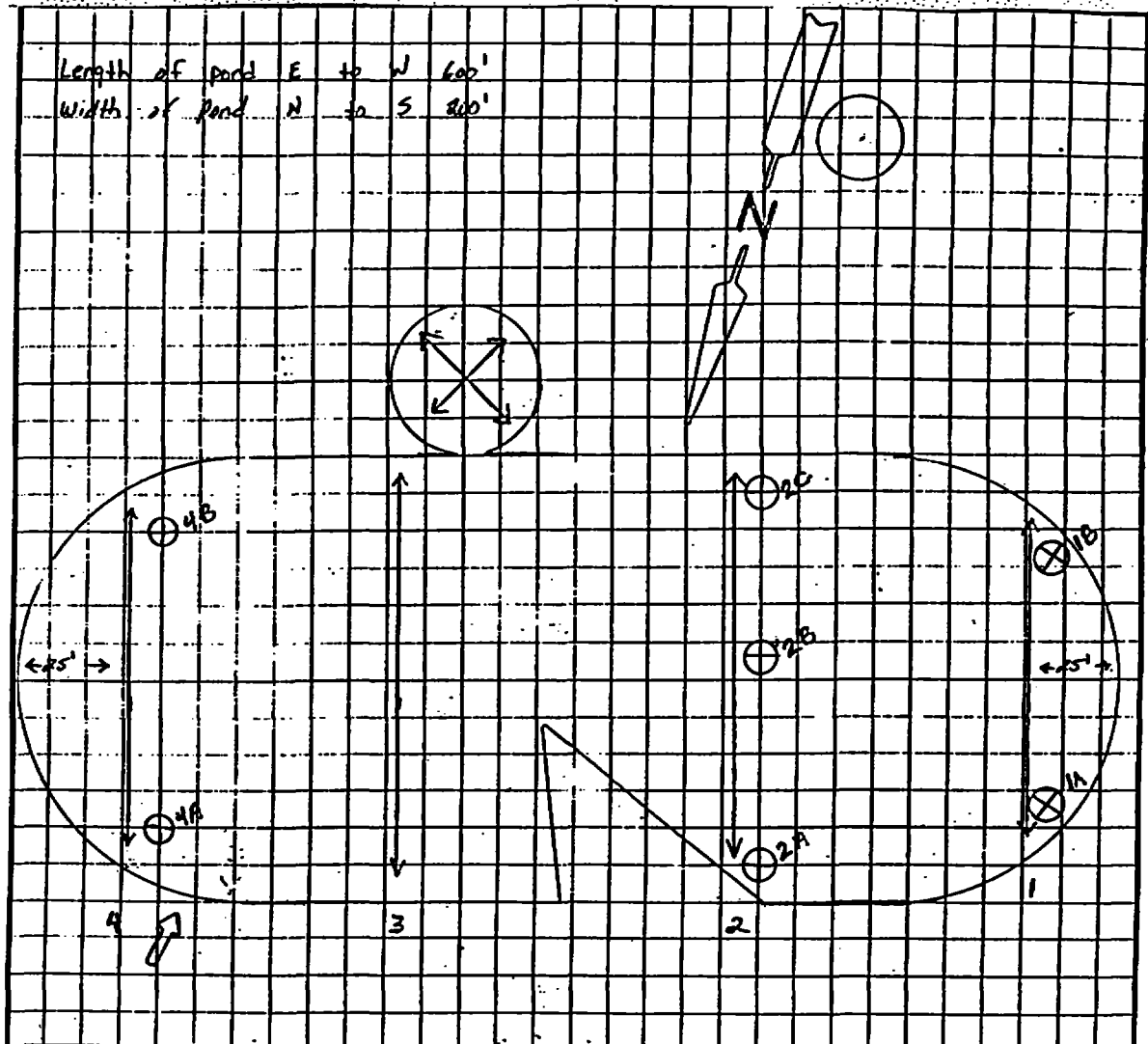


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Figure 3-8



LOST POND TRANSECTS
AND SAMPLE LOCATIONS

Figure 3-9

Lost Pond Soundings

Profile	1,2
Time	1320, 1330
Bearing	NW

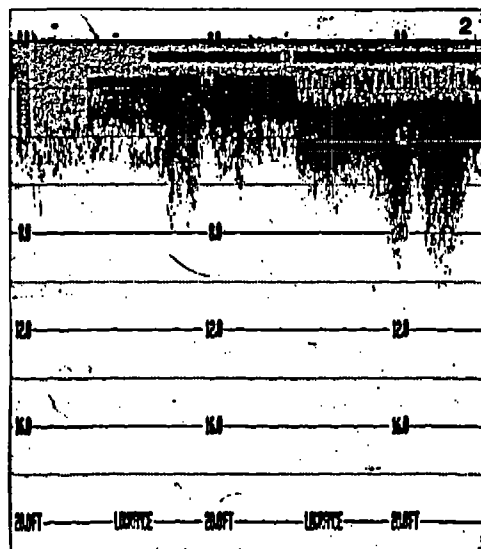
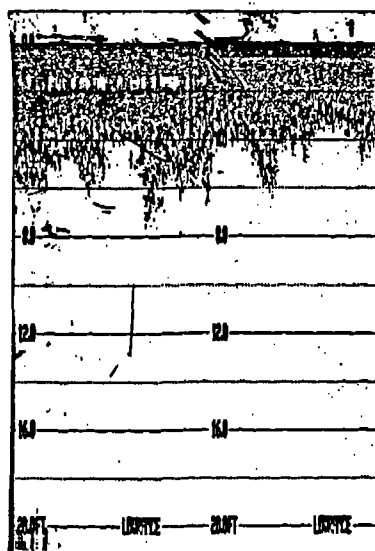


Figure 3-10

Lost Pond Soundings

Profile	<u>3</u>
Time	<u>1340</u>
Bearing	<u>SE</u>

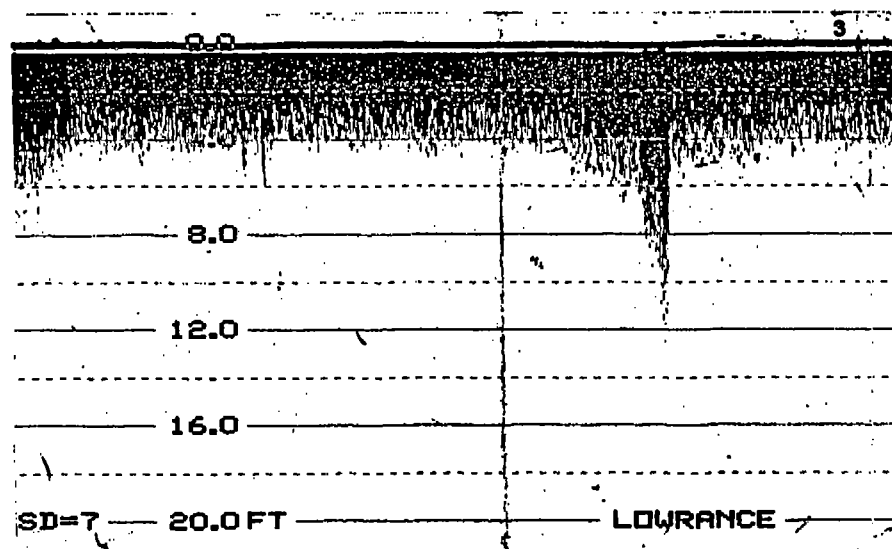
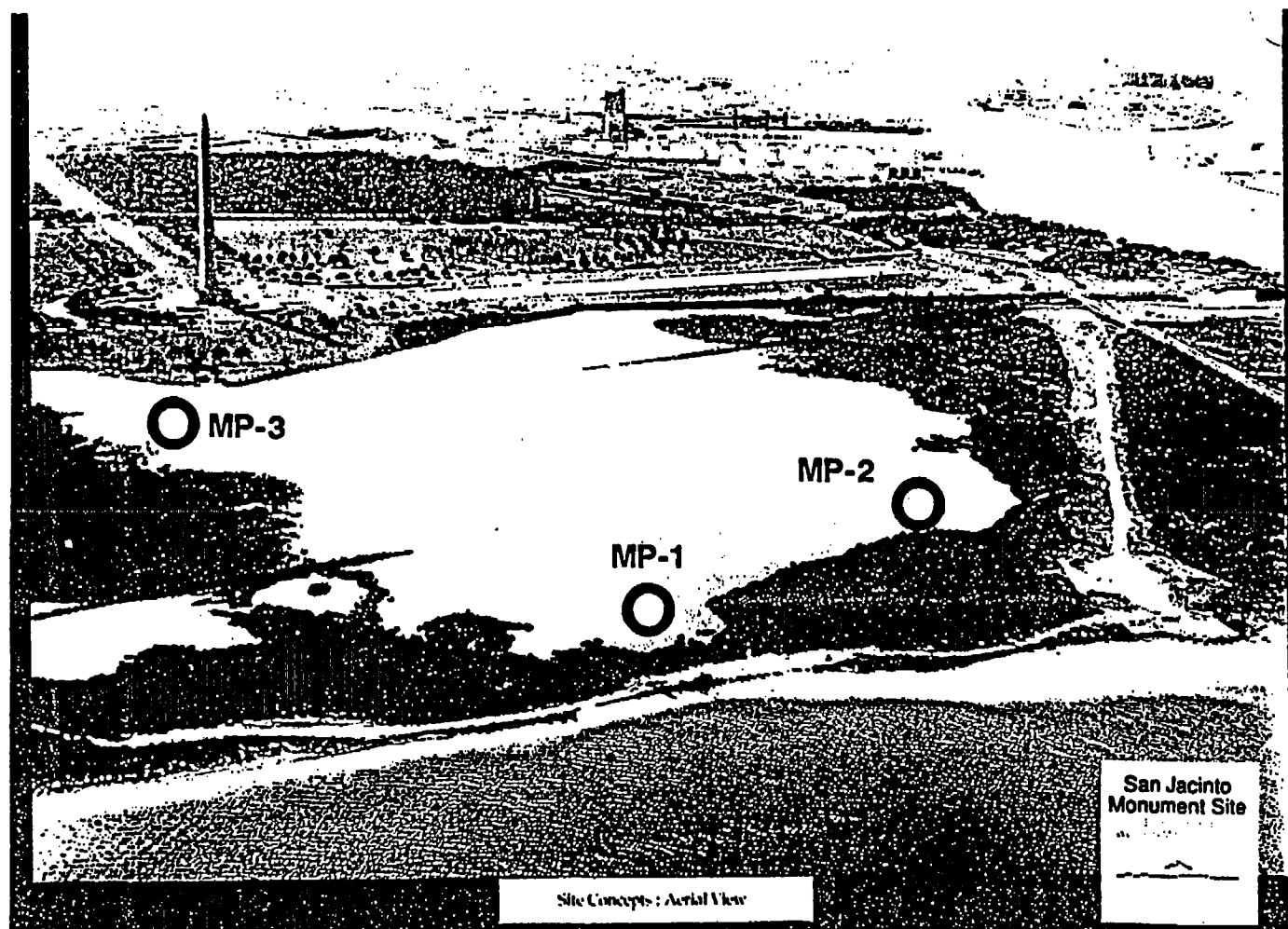


Figure 3-11



3.2.2 Fresh Water Pond Samples

Depths, Secchi disc and field parameters (temperature, specific conductance, pH and dissolved oxygen) were measured at seven locations in the Lost Pond, shown on Figure 3-8. These results are provided in Table 3-1. The water had very similar pH and turbidity to the main pond. DO was higher, despite being warmer on the day sampled. EC was very similar at approximately 13,000 $\mu\text{S}/\text{cm}$. This is equivalent to approximately 10,000 mg/L TDS, or about 30% of seawater salinity.

3.3 Lagoon Sediment Samples

Laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen (TOX) and total petroleum hydrocarbon (TPH) were performed for one composite sediment sample taken from three locations within the Monument Site lagoon. The composite comprised sample numbers MPS-1, MPS-2 and MPS-3. Approximate sample locations are shown on Figure 3-12.

Sediment samples were collected with a 1-foot split spoon sampler driven into the sediments at the sample location. Chemical analytical results are presented in Tables 3-2 and 3-3.

3.4 Soil Samples

Laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen and total petroleum hydrocarbon were performed for two composite soil samples from land areas approximately 50 to 250 feet from the shore. The North Area composite comprised sample numbers 1 through 6, from the north area of the site (soil sample locations are shown on Figures 3-13). The South Area composite comprised sample numbers 7 through 11, from the south area of the site.

Soil samples were composite cuttings collected by driving a powered auger into the soils at the sample location to a depth of approximately 5 feet. Chemical analytical results are provided in Tables 3-2 and 3-3. Field logs for these soil samples are provided in Table 3-4.

Table 3-2

Analytical Results - Organic Parameters

MEDIA	Area	Sample ID (S19)	VOCs	TOX	TPH	Pesticides PCBs
SOIL	North Area	A401	ND	ND	ND	ND
	South Area	A402	ND	ND	ND	ND
WATER	Main Pond #3	C302	Acetone 6	ND	ND	ND
SEDIMENTS	Main Pond	A501	Acetone 18	ND	ND	ND
	Peggy Lake	A403	ND	ND	57	ND
	Offshore	A502	ND	ND	ND	ND

Notes

Units: VOCs - ppb; TOX/TPH - ppm

0809080

Table 3-3
Analytical Results - Metals

Media	SOIL		SEDIMENTS			WATER
Site	North Area	South Area	Main Pond	Peggy Lake	Offshore	Main Pond
Al	5,890	12,000	10,800	1,300	347	0.452
Sb	<6.5	6.9	8.7	9.3	6.8	
As	2.00	4.60	9.20	9.70	0.97	0.04
Ba	54.9	126.0	101.0	194.0	10.6	0.0797
Be	0.38	0.07	0.85	1.10	0.24	<.001
Cd	<1.2	<1.2	1.6	1.7	1.2	<.005
Ca	15,300	22,800	7,530	8,130	195	76.3
Cr	6.6	12.7	15.2	25.7	1.0	<0.004
Co	4.1	6.9	7.1	9.2	1.2	<.005
Cu	4.3	7.9	10.3	17.6	1.2	<.005
Fe	5,400	11,300	16,600	16,800	428	0.466
Pb	8.8	11.2	43.5	45.6	1.2	0.0024
Mg	1,720	3,820	3,660	5,520	132	135
Mn	115	192	197	1,280	6	0.105
Hg	<0.12	<.12	0.23	0.33	0.12	<.0002
Ni	4.7	12.4	10.7	18.0	4.6	0.019
K	540	2,100	2,340	2,670	271	44.6
Se	<0.23	<.25	0.43	0.33	0.24	<.005
Ag	<0.69	<.74	0.93	0.99	0.72	<.003
Na	295	980	3,420	6,090	254	2,020
Th	<0.69	<.74	1.6	1.0	0.2	0.0017
Va	9.7	20.1	23.2	25.1	1.0	<.004
Zn	14.1	26.2	41.2	87.8	2.7	0.0135

Units: ppm

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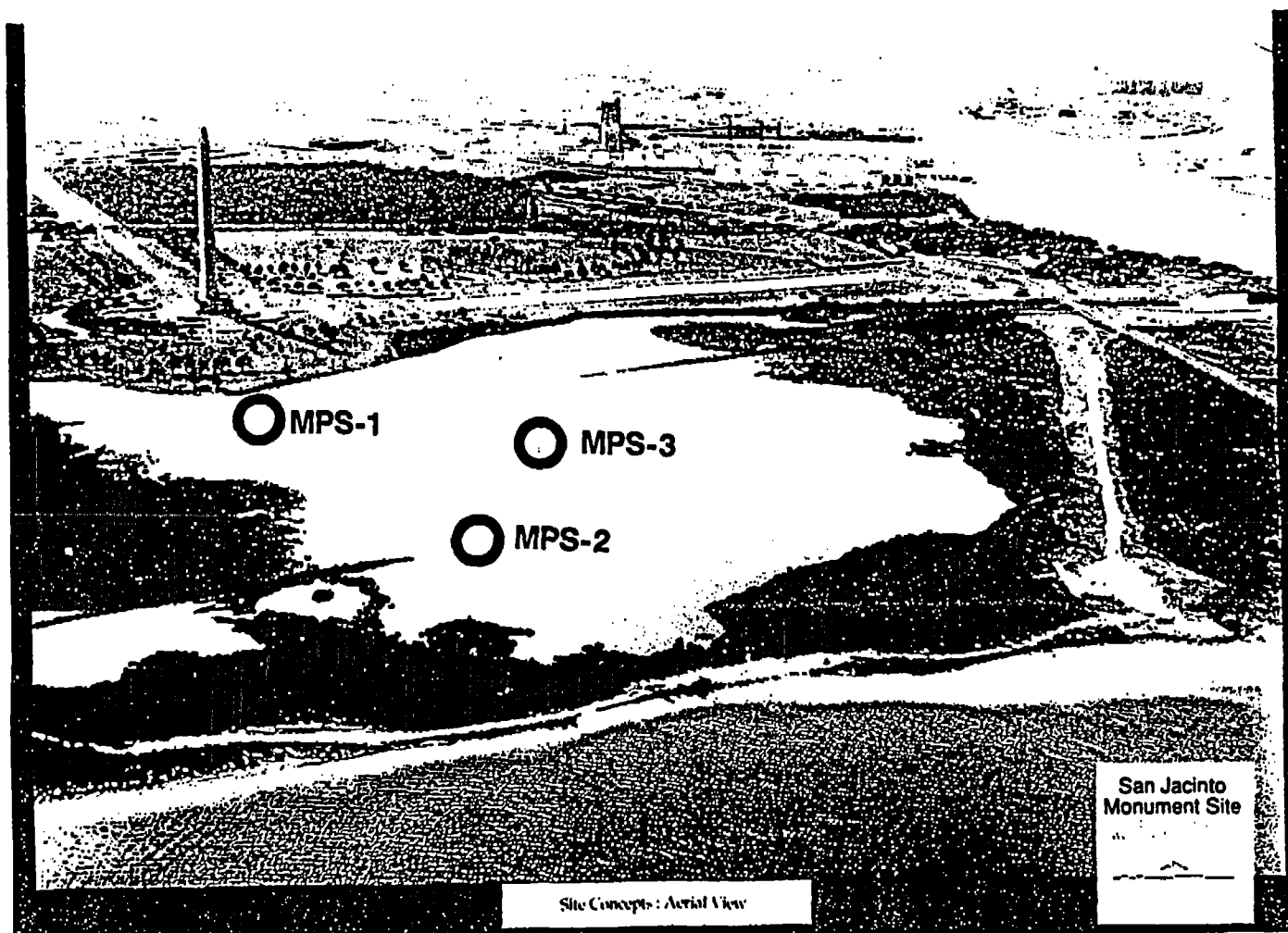
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Table 3-4

Soil Sample Logs

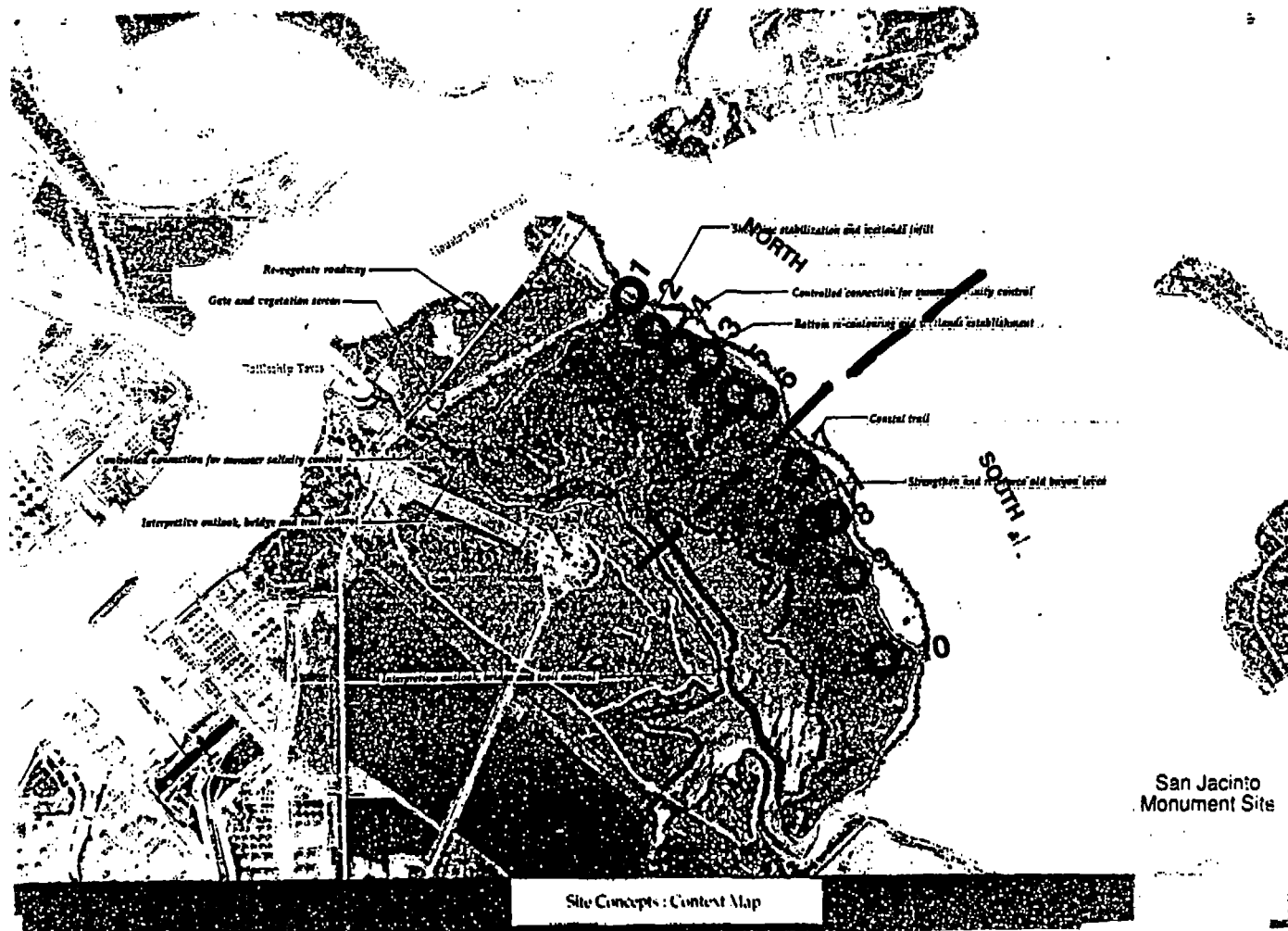
Sample	Description
N 1	Tan sand; gray silty sand, tan silty sand and gray sand.
N 2	Red Brown and tan clay 0-3 ft.; Coarse light brown sand 3-5 ft.
N 3	Light tan, medium sand 0-4 ft. gray medium sand 4-5 ft.
N 4	Tan sand 0-1 ft.; Tan to gray silty clay 1-3 ft.; tan/red clay 3-5 ft.
N 5	Tan to gray clay 0-2 ft., gray clay 2-3 ft. Coarse tan sand and gravel 3-5 ft.; approximately 400 ft from shore
N 6	Brown sand 0-1 ft.; Brown clay 1-2 ft.; Coarse tan sand 2-3 ft.; gray silty clay 3-5 ft.; trashy area of which water debris above beach.
S 7	Red and gray clay 0-5 ft.
S 8	Tan silty clay with gravel mix 0-5 ft.
S 9	Gray silty clay 0-4 ft.; coarse gray sand 4-5 ft.
S 10	Red-brown clay 0-3 ft.; medium brown sandy clay 3-5 ft, cleared area adjacent to pipeline corridor.
S 11	Inland area 400-500 ft from beach, upland site on side of mound. Red brown clay 0-3 ft. Gray-green clay 3-5 ft.

Figure 3-12



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Figure 3-13



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3.5 Drilling & Stratigraphy

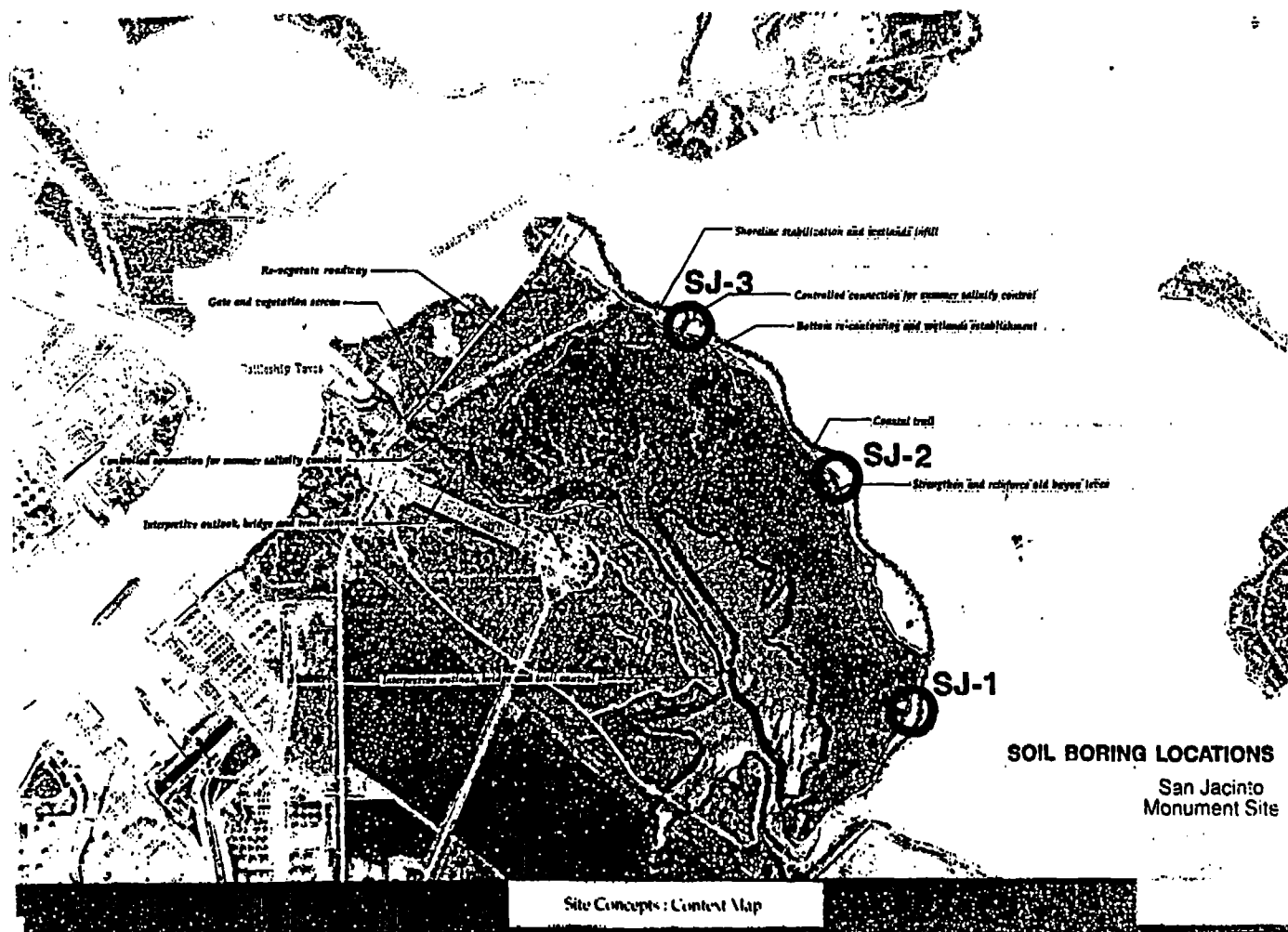
Soil borings were performed by Layne Environmental Services using a buggy-mounted CME 750 hollow-stem auger rig, equipped with 2-inch-diameter split-spoon samplers. Samples were collected from the ground surface to a nominal depth of 15 feet, at two-foot intervals. Samples were logged by Jim Thomson of AHA. Soil boring locations are shown in Figure 3-14. Boring logs are presented in Figures 3-15 through 3-17. Samples were discarded after logging and the hole was backfilled with soil cuttings. Boring locations were pegged for future surveying.

The shallow soil stratigraphy at the San Jacinto site is characterized by a thick sequence of mixed clays and sands in a chaotic assemblage typical of dredge fill. The thickness of fill material varied as follows: 0 feet at SJ-3 in the north; 3 feet at SJ-2 in the center; and 10 feet at SJ-1 in the south. As fill was placed to build up areas of subsidence, this suggests that the amount of subsidence was greater in the southern part of the site. The fill is of estimated low permeability. The fill is underlain by a gray-tan fine to medium grained sand with occasional silty layers, typical of alluvial deposition in this area, and very similar to that found at the Brownwood site. The sand is of estimated moderate permeability. This sand is found at the surface at SJ-3 in the north.

The sand is underlain by a distinctive black plastic clay of probable marine to estuarine origin, with associated black or dark gray or brown silt. The hole terminated in this clay at SJ-1 and SJ-2. At SJ-3, a lower sand, similar to the upper sand, was found underlying the black clay. The clay and sand units appeared to be natural features, with layering and fining upward sequences diagnostic of sedimentary deposition.

Slight petroleum-type odors were noted in all three borings. At SJ-1, odors were noted in the sand beneath the fill, and the upper part of the underlying black clay. At SJ-2, odors were noted in a silty clay within the sand sequence, and in the entire 2.5 feet of the black clay that was sampled. At SJ-3, odors were noted in the sand immediately above the black clay, but not in the lower sand. The most likely explanation for these observations is a release or releases of petroleum hydrocarbons causing an impact to shallow, near-surface soils. The source of the release(s) is uncertain and could be from nearby refineries, or from discharges into the Ship Channel. The age of the release(s) is also uncertain.

Figure 3-14











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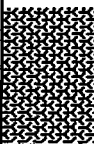

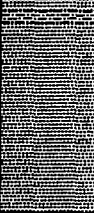



Figure 3-15

Soil Boring: SJ-1 Date Completed: 3/5/94 Geologist: J.A.M.Thomson Drilling Co.: Layne Environmental Services			
DEPTH	COLUMN	LITHOLOGY	DESCRIPTION
0.0		SOIL	Contains clay.
1.0		FILL DREDGED	Mainly gray mottled with yellow/brown silty clay. Contains partings, laminations, and thin beds of clean, medium grained, tan sand.
2.0		FILL DREDGED	Red/brown mottled gray clay.
3.0		FILL DREDGED	Mixed clay/sand layers, <0.5'.
4.0		SAND	
6.0		FILL DREDGED	Mixed gray, red, dark brown clay with frequent thin layers and partings of coarse to medium grained sand.
7.0		FILL DREDGED	
8.0		SAND SILTY	Fine grained, gray stained.
10.0		SAND SILTY	Fine grained, gray stained.
11.0		SAND SILTY	Dily odor.
12.0		SAND SILTY	Wet.
13.0		CLAY SILTY	Dark gray to black, high plasticity. Slight petroleum odor.
14.0		CLAY SILTY	Dark brown to dark tan.
15.0		SAND SILTY	Fine grained, gray/brown sand, brown silt, and occasional plastic clay.
16.0		SAND SILTY	
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

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Figure 3-16

Soil Boring: SJ-2		Date Completed: 3/5/94	
Geologist: J.A.M. Thomson		Drilling Co.: Layne Environmental Services	
DEPTH	COLUMN	LITHOLOGY	DESCRIPTION
0.0		FILL DREDGED	Mainly CLAY, dark brown, gray, red brown, and yellow/brown. Contains some fine to coarse grained gray SAND.
1.0			
2.0			
3.0		SAND SILTY	Fine to medium grained in gray/brown layers. Wet @ 6.0'.
4.0			
5.0			
6.0			
7.0		SILT SANDY SAND SILTY	Dark gray with fine grained sand.
8.0			Fine to medium grained in gray/brown layers.
9.0			
10.0			Petroleum odor.
11.0		SAND SILTY	Fine to medium grained in gray brown layers.
12.0			
13.0		CLAY	Plastic and black with petroleum odor and fibrous plant material.
14.0		CLAY	Dark gray and has petroleum odor.
15.0		CLAY	Black and has petroleum odor.
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

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Figure 3-17

Soil Boring: SJ-3 Date Completed: 3/5/94 Geologist: J.A.M.Thomson Drilling Co.: Layne Environmental Services			
DEPTH	COLUMN	LITHOLOGY	DESCRIPTION
0.0		SAND	Fine to medium grained, brown to gray with no odor.
1.0			
2.0			
3.0		SAND	Coarse grained.
3.5		SAND SILTY	Fine grained.
4.0		SAND	
5.0			Black with petroleum odor.
6.0			
7.0		SAND SILTY CLAYEY	Brown, high plasticity with fine sand.
8.0			
9.0			
10.0		CLAY SILTY CLAY SILTY	Black with high plasticity. Contains wood fragments.
11.0			
12.0		SAND	Medium to coarse grained, gray/tan, no odor.
13.0			
14.0		SAND	Fining-up sequence. Base contains up to 1/2 gravel and larger lumps of hard green SILT.
15.0			
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

WETLANDS ASSESSMENT
Hydrologic Evaluation**French Ltd. Project**
FLTG, Incorporated**3.6 Offshore Bathymetric Survey**

Offshore depth profiles were performed as previously described. Profile locations are shown in Figure 3-18. All profiles were run from the Houston Ship Channel towards the shore line. Sounding logs are presented in Figures 3-19 through 3-24. Maximum depths in the Channel ranged from 30 to 40 feet. The side of the Channel rises sharply. Northern profiles (1 through 6) show a broad, fairly level bank adjacent to the Channel, between 4.5 to 6.5 feet deep, sloping gently up toward the shore. Further south (profiles 7 through 12), the bank shows more relief, rising from depths of between 6 and 12 feet deep near the Channel, with a marked upslope toward the shore. The steepest rise was at profile 10. In the southern area (profiles 11 and 12), the sounding showed development of marked ripple structures that may be caused by tidal flows in and out of the inshore ponds and bayous.

3.7 Offshore Sediment Samples

Offshore sediment samples were collected from the upper 1 foot of sediment at the 5-foot depth on offshore sounding lines 1, 6, and 12 (see Figure 3-18). Results of chemical analysis are presented in Tables 3-2 and 3-3.

3.8 Peggy Lake Soil Samples

Laboratory chemical analyses for metals, volatile organics, pesticides, PCBs, total organic halogen and total petroleum hydrocarbon were performed for one composite soil sample taken from five locations within the Peggy Lake dredge disposal site. Sample locations are shown in Figure 3-25. The composite comprised sample numbers PL-1, PL-2, PL-3, PL-4 and PL-5.

Soil samples were taken with a 1-foot split-spoon sampler driven into the dredge spoils at each sample location. Field logs for these soil samples are presented in Table 3-5. Chemical analytical results for the composite sample are presented in Tables 3-2 and 3-3.

3.9 Tidal Mixing Evaluation

Tidal mixing appears to be restricted by length, depth and meandering of the Santa Anna Bayou; restricted tidal flow is indicated by relatively high salinity within the lagoon. Field observations indicated relatively little water movement in the bayou which connects the lagoon with the San Jacinto Estuary.

WETLANDS ASSESSMENT
Hydrologic Evaluation**French Ltd. Project**
FLTG, Incorporated**Table 3-5**

CLIENT: FRENCH LIMITED
PROJECT: WETLANDS PROJECT (Peggy Lake Core Sampling)
DATE: MARCH 5, 1994

Sample ID: PL-1 Time: 10:10 AM

<u>Depth</u>	<u>Description</u>
0' - 2'	GRAY SILTY CLAY
2' - 3'	BROWN SILTY CLAY

Sample ID: PL-2 Time: 10:30 AM

<u>Depth</u>	<u>Description</u>
0' - 1'	BROWN SILTY CLAY
1' - 2'	TAN SILTY CLAY
2' - 3'	TAN SILTY CLAY WITH CHUNKS OF BROWN CLAY

Sample ID: PL-3 Time: 11:10 AM

<u>Depth</u>	<u>Description</u>
0' - 3'	BROWN SILTY CLAY

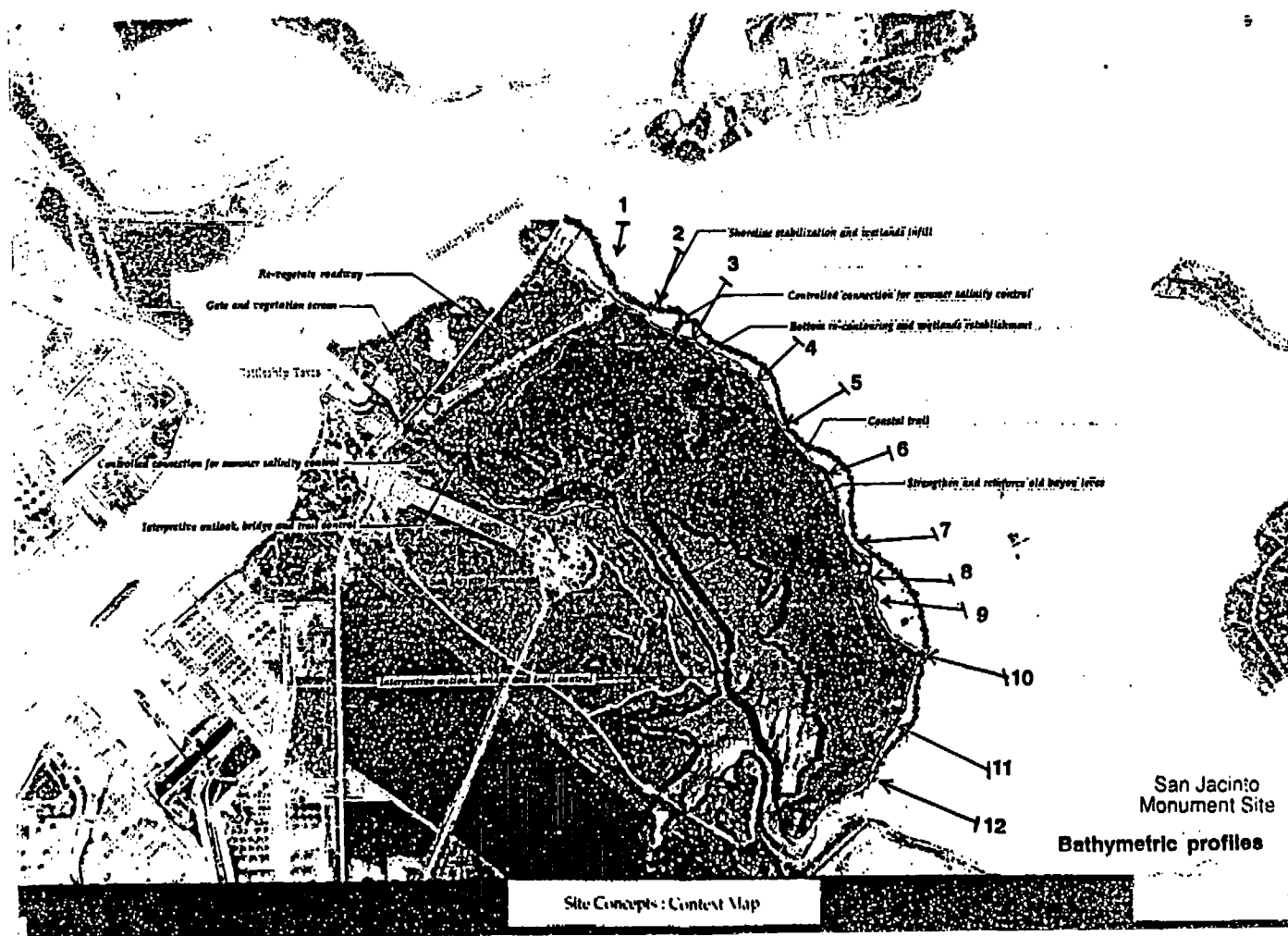
Sample ID: PL-4 Time: 11:35 AM

<u>Depth</u>	<u>Description</u>
0' - 1'	GRAYISH BROWN SILTY CLAY
1' - 3'	BROWN SILTY CLAY

Sample ID: PL-5 Time: 12:00 AM

<u>Depth</u>	<u>Description</u>
0' - 3'	BROWN SILTY CLAY

Figure 3-18

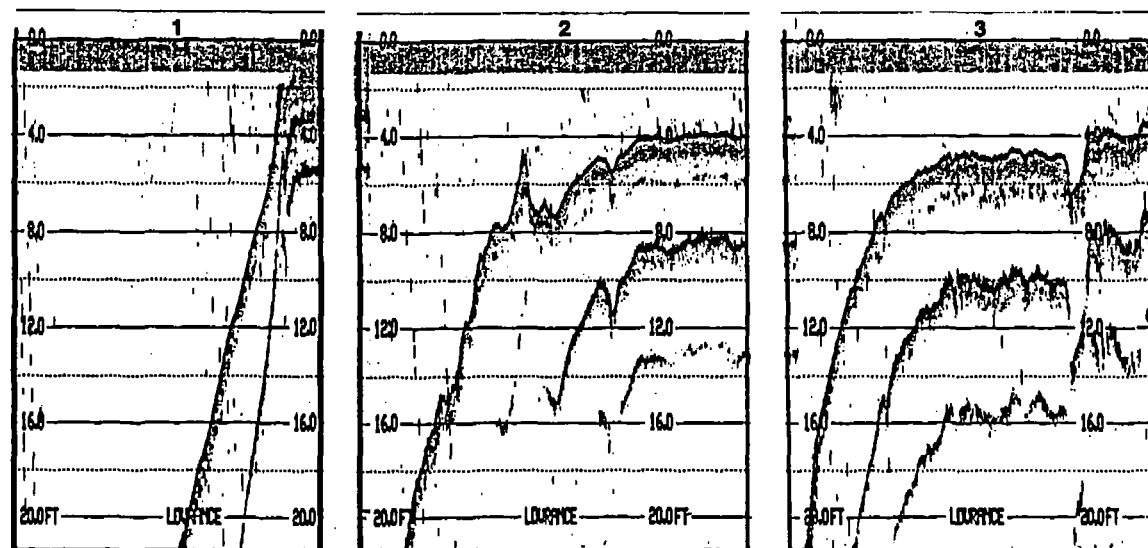


080705

Figure 3-19

San Jacinto Offshore Soundings

Profile	<u>1,2,3</u>
Time	<u>3/3/94 12:30</u>
Bearing	<u>230°M</u>



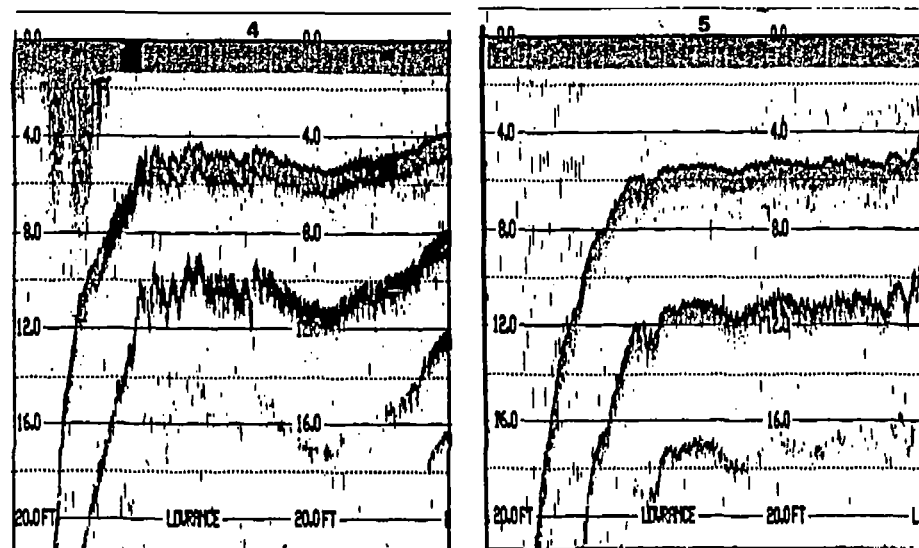
Line 1 terminated ± 200 ft from shore

Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-20

San Jacinto Offshore Soundings

Profile	4,5
Time	3/3/94 12:45
Bearing	215°M



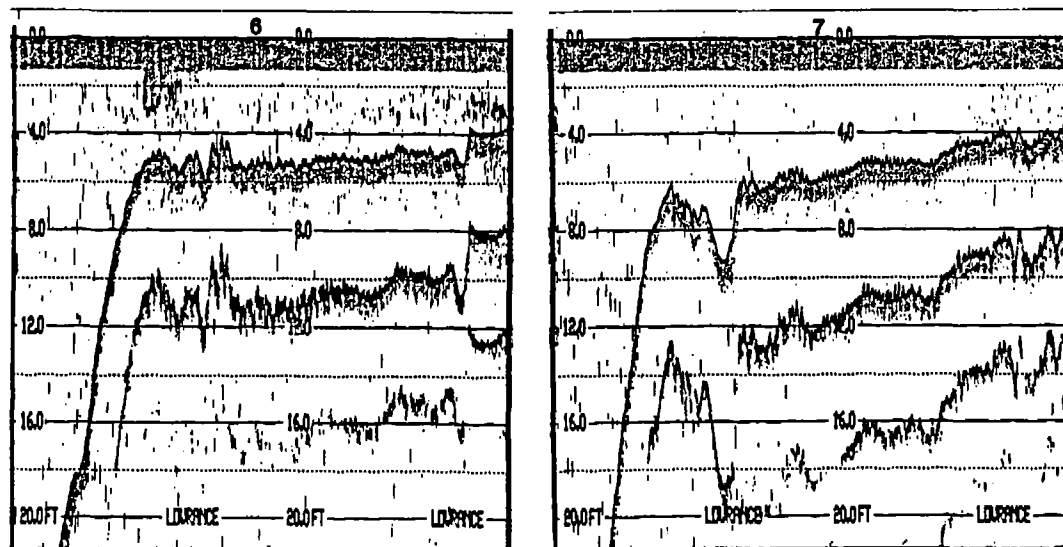
Line 5 terminated ± 20 ft from shore

Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-21

San Jacinto Offshore Soundings

Profile	<u>6,7</u>
Time	<u>3/3/94 13:00</u>
Bearing	<u>240°M</u>

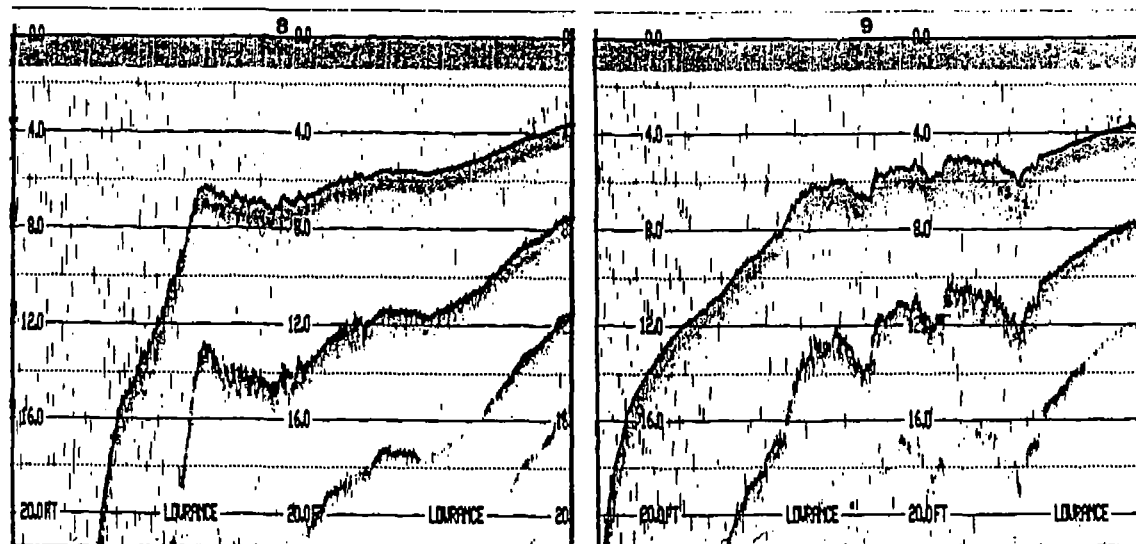


Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-22

San Jacinto Offshore Soundings

Profile	8,9
Time	3/3/94 13:15
Bearing	255°M

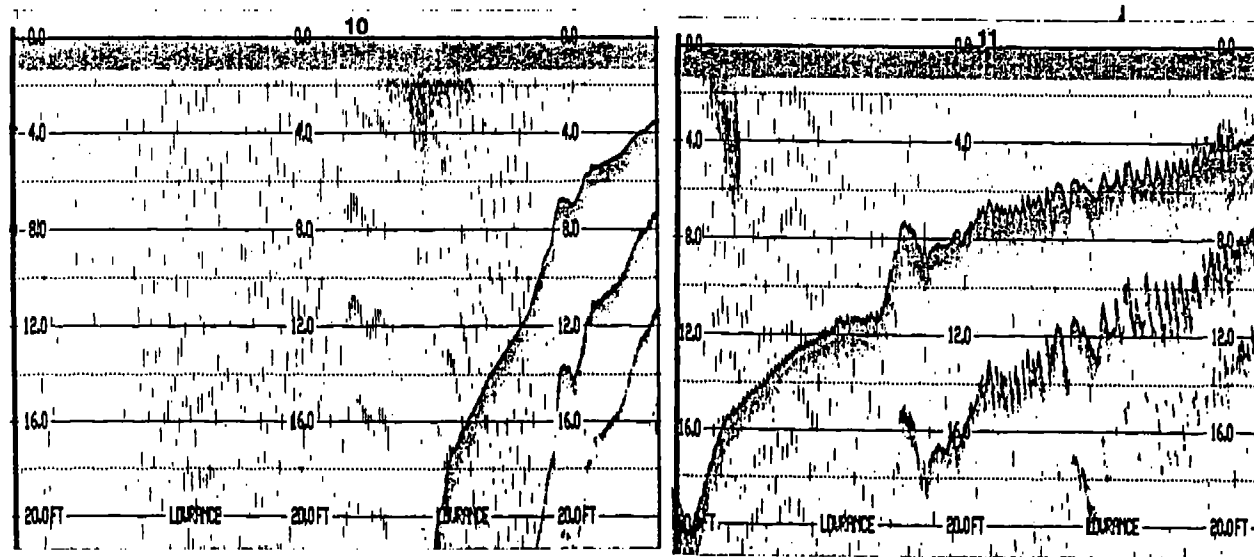


Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-23

San Jacinto Offshore Soundings

Profile	<u>10,11</u>
Time	<u>3/3/94 13:35</u>
Bearing	<u>285°M</u>

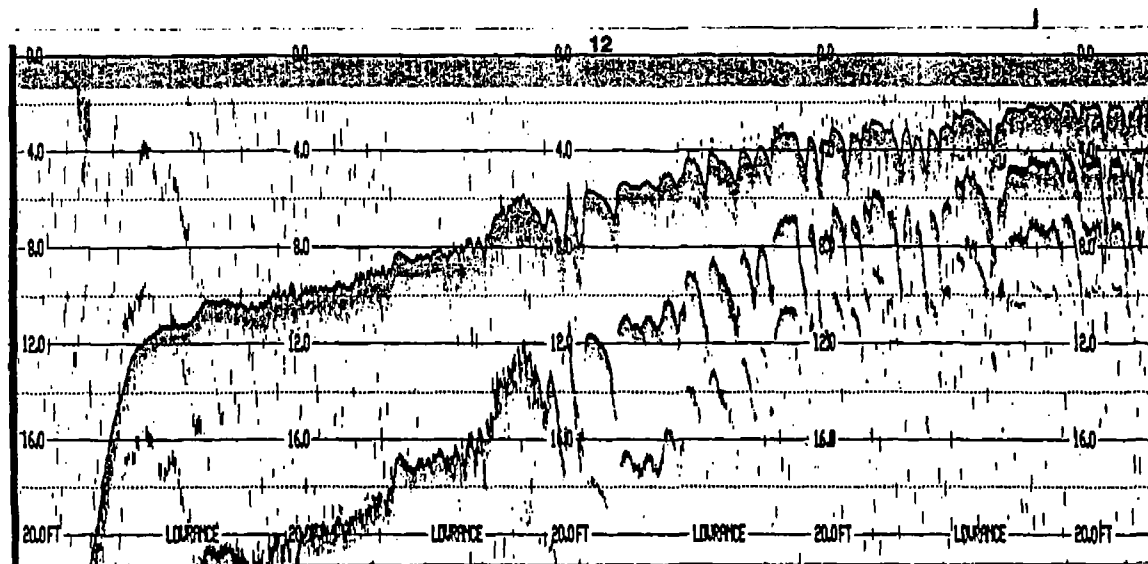


Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-24

San Jacinto Offshore Soundings

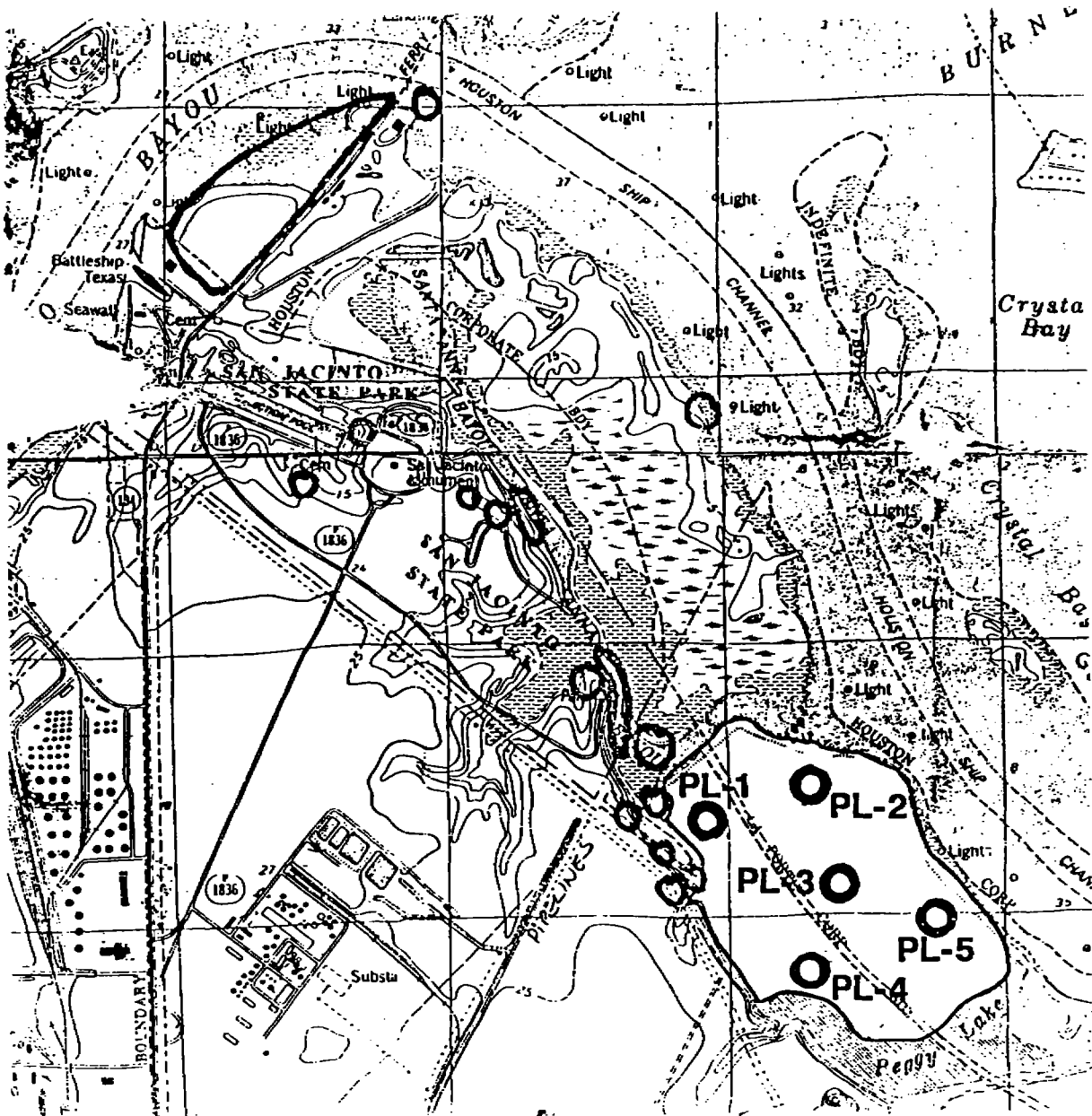
Profile	<u>12</u>
Time	<u>3/3/94 13:50</u>
Bearing	<u>290°M</u>



Line 12 terminated ± 300 ft from shore

Soundings from Houston Ship Channel to shore line; sounder 0.5 ft below WL; profiles terminated at 2 ft. depth

Figure 3-25



PEGGY LAKE SAMPLE LOCATIONS

080713

WETLANDS ASSESSMENT
Hydrologic Evaluation

French Ltd. Project
FLTG, Incorporated

APPENDIX A
LABORATORY ANALYTICAL REPORTS

080714

Sample No.	Sample Collected Date	Location
S19A000301	3/03/94	North Area
S19A000302	3/03/94	Central Area
S19A000303	3/03/94	Perimeter
S19A000304	3/03/94	West Pond
S19A000305	3/03/94	East Pond
- S19A000401	3/04/94	North Area
- S19A000402	3/04/94	South Area
- S19A000403	3/04/94	PL1-PL5
- S19A000501	3/07/94	MPS-1
- S19A000502	3/07/94	OS-1
S19C000301	3/04/94	#3
- S19C000302	3/04/94	MP-3
S19F000101	3/05/94	1-D
S19F000102	3/05/94	1-S
S19F000103	3/05/94	2-C
S19F000104	3/05/94	4-S
S19F000105	3/05/94	5-S
S19F000106	3/05/94	6-S
- S19F000107	3/05/94	MP1
- S19F000108	3/05/94	MP2

080715

10-MAR-1994

Page 1

Summary of Analytical Results

Date received: 4-MAR-1994 Customer: FHIG, INC. Job name: H94-03.51

	Samples					
Checker LabNet ID	SI-001	SI-002	SI-003	SI-004	SI-005	SI-006
Sampling Point	QA QC	X	QA QC	QA QC	X	X
Date Sampled	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994	3-MAR-1994
Customer ID	LAB ELANK	SI94000301	SI94000301	SI94000301	SI94000302	SI94000303
	NA	NA	UP	MS	NA	NA

Parameters	Units						
Total Organic Hologens (Solid)	mg/Kg	<20.0	<25.0	<25.0	110 *	<24.0	<25.0
Analyst: FAS							
Date/Time: 03/07/94 10:00							
Dilution: 1.0							
Total Pet. Hydrocarbons (Solid)	mg/Kg	<25.0	<31.0	<31.0	99.3 *	<30.0	<32.0
Analyst: ELL/JCB							
Date/Time: 03/09/94 10:00							
Dilution: 1.0							

* - % Recovery
 NR - Not Required
 NA - Not Applicable

080710

10-MAR-1994

Page 2

Summary of Analytical Results

Date received: 4-MAR-1994 Customer: FINEG, INC. Job name: E94-03.51

Samples

Chester LabNet ID	51-007	51-008
Sampling Point	X	X
Date Sampled	3-MAR-1994	3-MAR-1994
Customer ID	SL94000304	SL94000305
	NA	NA

Parameters	Units		
Total Organic Halogens (Solid)	mg/Kg	<26.0	<25.0
Analyst: RNS			
Date/Time: 03/07/94 10:00			
Dilution: 1.0			
Total Pet. Hydrocarbons (Solid)	mg/Kg	54.0	<32.0
Analyst: ELL/JOB			
Date/Time: 03/09/94 10:00			
Dilution: 1.0			

* - % Recovery

NR - Not Required

NA - Not Applicable

80717

INST ID: 4020

SAMPLE NUMBER: B19A000301

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
NORTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940208102

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V02

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C010	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C055	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C145	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYLETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80712

CHESTER DC # ---- 8

INST ID: 4020

SAMPLE NUMBER: B19A000302

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
CENTRAL AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305105

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V05

DILUTION FACTOR: 1.20

COMPOUND	DETECTION	AMOUNT
	LIMIT (MICROGRAMS / KG)	FOUND
C010 CHLOROMETHANE	12 U	
C015 BROMOMETHANE	12 U	
C020 VINYL CHLORIDE	12 U	
C025 CHLOROETHANE	12 U	
C030 METHYLENE CHLORIDE	6 U	
C035 ACETONE	12 U	
C040 CARBON DISULFIDE	6 U	
C045 1,1-DICHLOROETHENE	6 U	
C050 1,1-DICHLOROETHANE	6 U	
C053 1,2-DICHLOROETHENE (TOTAL)	6 U	
C060 CHLOROFORM	6 U	
C065 1,2-DICHLOROETHANE	6 U	
C110 2-BUTANONE	12 U	
C115 1,1,1-TRICHLOROETHANE	6 U	
C120 CARBON TETRACHLORIDE	6 U	
C125 VINYL ACETATE	12 U	
C130 BROMODICHLOROMETHANE	6 U	
C140 1,2-DICHLOROPROPANE	6 U	
C143 CIS-1,2-DICHLOROPROPENE	6 U	
C150 TRICHLOROETHENE	6 U	
C155 DIBROMOCHLOROMETHANE	6 U	
C160 1,1,2-TRICHLOROETHANE	6 U	
C165 BENZENE	6 U	
C172 TRANS-1,3-DICHLOROPROPENE	6 U	
C175 2-CHLOROETHYL VINYLETHYL ETHER	12 U	
C180 BROMOFORM	6 U	
C205 4-METHYL-2-PENTANONE	12 U	
C210 2-HEXANONE	12 U	
C220 TETRACHLOROETHENE	6 U	
C225 1,1,2,2-TETRACHLOROETHANE	6 U	
C230 TOLUENE	6 U	
C235 CHLOROBENZENE	6 U	
C240 ETHYLBENZENE	6 U	
C245 STYRENE	6 U	
C250 XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80719

INST ID: 4020

CHESTER DC # ---- 8
SAMPLE NUMBER: 819AD00303

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
PERIMETER AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305106

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V06

DILUTION FACTOR: 1.20

COMPOUND	DETECTION	AMOUNT
	LIMIT (MICROGRAMS / KG)	FOUND
C010 CHLOROMETHANE	12 U	
C015 BROMOMETHANE	12 U	
C020 VINYL CHLORIDE	12 U	
C025 CHLOROETHANE	12 U	
C030 METHYLENE CHLORIDE	6 U	
C035 ACETONE	12 U	
C040 CARBON DISULFIDE	6 U	
C045 1,1-DICHLOROETHENE	6 U	
C050 1,1-DICHLOROETHANE	6 U	
C055 1,2-DICHLOROETHENE (TOTAL)	6 U	
C060 CHLOROFORM	6 U	
C065 1,2-DICHLOROETHANE	6 U	
C110 2-BUTANONE	12 U	
C115 1,1,1-TRICHLOROETHANE	6 U	
C120 CARBON TETRACHLORIDE	6 U	
C125 VINYL ACETATE	12 U	
C130 BROMODICHLOROMETHANE	6 U	
C140 1,2-DICHLOROPROPANE	6 U	
C145 CIS-1,3-DICHLOROPROPENE	6 U	
C150 TRICHLOROETHENE	6 U	
C155 DIBROMOCHLOROMETHANE	6 U	
C160 1,1,2-TRICHLOROETHANE	6 U	
C165 BENZENE	6 U	
C172 TRANS-1,3-DICHLOROPROPENE	6 U	
C175 2-CHLOROETHYL VINYL ETHER	12 U	
C180 BROMOFORM	6 U	
C205 4-METHYL-2-PENTANONE	12 U	
C210 2-HEXANONE	12 U	
C220 TETRACHLOROETHENE	6 U	
C225 1,1,2,2-TETRACHLOROETHANE	6 U	
C230 TOLUENE	6 U	
C235 CHLOROBENZENE	6 U	
C240 ETHYLBENZENE	6 U	
C245 STYRENE	6 U	
C250 XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

80720

INST ID: 4020

CHESTER DC # ---- 8
SAMPLE NUMBER: 817A000304

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
WEST POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305107

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY: DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03051V07

DILUTION FACTOR: 1.30

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	13 U	
C015	BROMOMETHANE	13 U	
C020	VINYL CHLORIDE	13 U	
C025	CHLOROETHANE	13 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	13	24
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C053	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	13 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	13 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C143	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYLETHER	13 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	13 U	
C210	2-HEXANONE	13 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

INST ID: 4020

CHESTER DC # ---- B
SAMPLE NUMBER: S19A000305

ORGANIC ANALYSIS DATA SHEET

BROWNWOOD
EAST POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305108

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATAFILE: RU03051V08

DATE ANALYZED: 03/11/94

DILUTION FACTOR: 1.30

COMPOUND

DETECTION
LIMIT

(MICROGRAMS / KG)

AMOUNT
FOUND

C010	CHLOROMETHANE	13 U	
C015	BROMOMETHANE	13 U	
C020	VINYL CHLORIDE	13 U	
C025	CHLOROETHANE	13 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	13	6 U
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C053	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	13 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	13 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C143	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYLETHER	13 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	13 U	
C210	2-HEXANONE	13 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

TOTAL P.05

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CAP0310 040
Sample Name : H94-03.51-002
Project No. : S19A
Percent Moisture : 19 %
Client ID : S19A0003 01

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 11-MAR-1994
Checked by : MJM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 10:10 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.8	21	
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.2	13	
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.83	3.8	
959-98-8	ENDOSULFAN I	8.3	8.3	U
33213-65-9	ENDOSULFAN II	8.3	8.3	U
1031-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J - Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080723

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0310-046
 Sample Name : H94-03.51-005
 Project No. : S19A
 Percent Moisture : 16 %
 Client ID : S19A0003 02

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : MTM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 08:37 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.40	0.40	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.6	5.6	U
72-54-8	4,4'-DDD	2.0	2.0	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.8	4.8	U
60-57-1	DIELDRIN	0.80	0.80	U
959-98-8	ENDOSULFAN I	8.0	8.0	U
33213-65-9	ENDOSULFAN II	8.0	8.0	U
1031-07-8	ENDOSULFAN SULFATE	4.0	4.0	U
72-20-8	ENDRIN	2.4	2.4	U
7421-93-4	ENDRIN ALDEHYDE	4.0	4.0	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.0	2.0	U
72-43-5	METHOXYCHLOR	20	20	U
8001-35-2	TOXAPHENE	96	96	U
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR 1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
53469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097 69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080724

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-034
Sample Name : H94-03.51-005
Project No. : S19A
Client ID : S19A0003 02

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MJM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 15:35 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR-1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
53469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097-69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U
	TOTAL PCBS *	20	20	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CAP0310-047
Sample Name : H94-03.51-006
Project No. : S19A
Percent Moisture : 19 %
Client ID : S19A0003 03

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 11-MAR-1994
Checked by : M/M

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 09:24 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.6	5.6	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.2	13	
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.83	0.83	U
959-98-8	ENDOSULFAN I	8.3	8.3	U
33213-65-9	ENDOSULFAN II	8.3	8.3	U
1031-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-035
Sample Name : H94-03.51-006
Project No. : S19A
Client ID : S19A0003 03

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MSM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 16:22 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U
	TOTAL PCBS *	21	21	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080727

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0910-053
 Sample Name : H94-03.51-007
 Project No. : S19A
 Percent Moisture : 23 %
 Client ID : S19A0003 04

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 14:03 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.44	0.44	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAMMA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	6.1	6.1	U
72-54-8	4,4'-DDD	2.2	2.2	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.2	5.2	H
60-57-1	DIELDRIN	0.87	0.87	U
959-98-8	ENDOSULFAN I	8.7	8.7	U
33213-65-9	ENDOSULFAN II	8.7	8.7	U
1031-07-8	ENDOSULFAN SULFATE	4.4	4.4	U
72-20-8	ENDRIN	2.6	2.6	U
7421-93-4	ENDRIN ALDEHYDE	4.4	4.4	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.2	2.2	U
72-43-5	METHOXYCHLOR	22	22	U
8001-35-2	TOXAPHENE	110	110	U
12674-11-2	AROCLOR-1016	22	22	U
11104-28-2	AROCLOR-1221	22	22	U
11141-16-5	AROCLOR-1232	22	22	U
53469-21-9	AROCLOR-1242	22	22	U
12672-29-6	AROCLOR-1246	22	22	U
11097-69-1	AROCLOR-1254	22	22	U
11096-82-5	AROCLOR-1260	22	22	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080728

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-036
Sample Name : H94-03.51-007
Project No. : S19A
Client ID : S19A0003 04

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MJA

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 8-MAR-1994 17:08 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
12674-11-2	AROCLOR-1016	22	22	U
11104-28-2	AROCLOR-1221	22	22	U
11141-16-5	AROCLOR-1232	22	22	U
53469-21-9	AROCLOR-1242	22	22	U
12672-29-6	AROCLOR-1248	22	22	U
11097-69-1	AROCLOR-1254	22	22	U
11096-82-5	AROCLOR-1260	22	22	U
	TOTAL PCBs *	22	22	U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080729

Chester LabNet - HOUSTON

Reported on : 14-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAPO310-052
 Sample Name : H94-03.51-008
 Project No. : S19A
 Percent Moisture : 22 %
 Client ID : S19A0003 05

Work Order : H94-03.51
 Date Collected : 03-MAR-1994
 Matrix : SOIL
 Date Received : 04-MAR-1994
 Date Extracted : 11-MAR-1994
 Checked by : NTM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 12-MAR-1994 13:16 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.43	0.43	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAMMA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	6.0	6.0	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.1	5.1	U
60-57-1	DIELDRIN	0.86	0.86	U
959-98-8	ENDOSULFAN I	8.6	8.6	U
33213-65-9	ENDOSULFAN II	8.6	8.6	U
1031-07-8	ENDOSULFAN SULFATE	4.3	4.3	U
72-20-8	ENDRIN	2.6	2.6	U
7421-93-4	ENDRIN ALDEHYDE	1.3	1.3	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
0001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
59469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080730

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
Sample ID : CBP0307-037
Sample Name : H94-03.51-008
Project No. : S19A
Client ID : S19A0003 05

Work Order : H94-03.51
Date Collected : 03-MAR-1994
Matrix : SOIL
Date Received : 04-MAR-1994
Date Extracted : 07-MAR-1994
Checked by : MJA

Organic Analysis Data Sheet
Compounds Analysis by SW646 Method 8080

Date Analyzed : 8-MAR-1994 17:55 Dilution Factor : 1.000
Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg
12674-11-2	AROCLOR-1016	21	21 U
11104-28-2	AROCLOR-1221	21	21 U
11141-16-5	AROCLOR-1232	21	21 U
53469-21-9	AROCLOR-1242	21	21 U
12672-29-6	AROCLOR-1248	21	21 U
11097-69-1	AROCLOR-1254	21	21 U
11096-82-5	AROCLOR-1260	21	21 U
	TOTAL PCBS *	21	21 U

* = Total PCBs calculated as found AR 1242.

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080731

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000301

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: 519A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351002

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5540.00			P
7440-36-0	Antimony	7.00	U		P
7440-38-2	Arsenic	5.40		SN	F
7440-39-3	Barium	25.00	B		P
7440-41-7	Beryllium	0.25	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	1300.00			P
7440-47-3	Chromium	8.00			P
7440-48-4	Cobalt	2.10	B		P
7440-50-8	Copper	15.10			P
7439-89-6	Iron	4320.00			P
7439-92-1	Lead	45.00			F
7439-95-4	Magnesium	656.00	B		P
7439-96-5	Manganese	80.80			P
7439-97-6	Mercury	0.13	U	*	CV
7440-02-0	Nickel	6.70	B		P
7440-09-7	Potassium	200.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.75	U		P
7440-23-5	Sodium	1010.00	B	E	P
7440-28-0	Thallium	0.75	U		F
7440-62-2	Vanadium	12.80			P
7440-66-6	Zinc	32.20		E	P
	Cyanide				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

080732

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000302

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351005

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 83.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3600.00			P
7440-36-0	Antimony	6.70	U		P
7440-38-2	Arsenic	2.00	B	+N	F
7440-39-3	Barium	22.20	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	602.00	B		P
7440-47-3	Chromium	4.90			P
7440-48-4	Cobalt	2.00	B		P
7440-50-8	Copper	3.20	B		P
7439-89-6	Iron	4860.00			P
7439-92-1	Lead	11.10			F
7439-95-4	Magnesium	334.00	B		P
7439-96-5	Manganese	103.00			P
7439-97-6	Mercury	0.12	U	*	CV
7440-02-0	Nickel	4.60	U		P
7440-09-7	Potassium	269.00	U		P
7782-49-2	Selenium	0.24	U		F
7440-22-4	Silver	0.72	U		P
7440-23-5	Sodium	229.00	B	E	P
7440-28-0	Thallium	0.72	U		F
7440-62-2	Vanadium	10.80	B		P
7440-66-6	Zinc	15.80		E	P
	Cyanide				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80733

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000303

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351006

Level (low/med): LOW

Date Received: 03/04/94

-% Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2520.00			P
7440-36-0	Antimony	6.90	U		P
7440-38-2	Arsenic	0.99	U	WN	F
7440-39-3	Barium	22.10	B		P
7440-41-7	Beryllium	0.25	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	629.00	B		P
7440-47-3	Chromium	3.30			P
7440-48-4	Cobalt	1.20	U		P
7440-50-8	Copper	2.90	B		P
7439-89-6	Iron	2180.00			P
7439-92-1	Lead	13.00			F
7439-95-4	Magnesium	348.00	B		P
7439-96-5	Manganese	63.50			P
7439-97-6	Mercury	0.12	U	*	CV
7440-02-0	Nickel	4.70	U		P
7440-09-7	Potassium	278.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.74	U		P
7440-23-5	Sodium	664.00	B	E	P
7440-28-0	Thallium	0.74	U		F
7440-62-2	Vanadium	6.40	B		P
7440-66-6	Zinc	27.60		E	P
	Cyanide				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

080734

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000304

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351007

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3130.00			P
7440-36-0	Antimony	7.10	U		P
7440-38-2	Arsenic	1.10	B	N	F
7440-39-3	Barium	22.10	B		P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	1.30	U		P
7440-70-2	Calcium	711.00	B		P
7440-47-3	Chromium	3.50			P
7440-48-4	Cobalt	1.30	U		P
7440-50-8	Copper	4.30	B		P
7439-89-6	Iron	2670.00			P
7439-92-1	Lead	20.20		S	F
7439-95-4	Magnesium	454.00	B		P
7439-96-8	Manganese	33.50			P
7439-97-6	Mercury	0.13	U	*	CV
7440-02-0	Nickel	4.80	U		P
7440-09-7	Potassium	285.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.76	U		P
7440-23-5	Sodium	747.00	B	Z	P
7440-28-0	Thallium	0.76	U		F
7440-62-2	Vanadium	7.10	B		P
7440-66-6	Zinc	16.20		E	P
	Cyanide				NR

Color Before: BLACK

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

80735

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000305

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940351008

Level (low/med): LOW

Date Received: 03/04/94

% Solids: 78.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5440.00			P
7440-36-0	Antimony	7.10	U		P
7440-38-2	Arsenic	1.80	B	N	F
7440-39-3	Barium	48.00	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	1.30	U		P
7440-70-2	Calcium	651.00	B		P
7440-47-3	Chromium	6.50			P
7440-48-4	Cobalt	7.00	B		P
7440-50-8	Copper	3.50	B		P
7439-89-6	Iron	5290.00			P
7439-92-1	Lead	18.50			F
7439-95-4	Magnesium	795.00	B		P
7439-96-5	Manganese	168.00			P
7439-97-6	Mercury	0.13	U	*	CV
7440-02-0	Nickel	4.80	U		P
7440-09-7	Potassium	284.00	U		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	0.76	U		P
7440-23-5	Sodium	1050.00	B	E	P
7440-28-0	Thallium	0.76	U		F
7440-62-2	Vanadium	16.10			P
7440-66-6	Zinc	14.70		E	P
	Cyanide				NR

Color Before: DK.GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

080736

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 7-MAR-1994 Customer: FINEG, INC. Job name: H94-03.56

Samples

Checker LabNet ID	56-001	56-002	56-003	56-004	56-005	56-006
Sampling Point	QA QC	X	QA QC	QA QC	X	X
Date Sampled	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994
Customer ID	LAB BLANK	SL9A000401	SL9A000401	SL9A000401	SL9A000402	SL9A000403
	NA	NA	DUP	MS	NA	NA

Parameters

Units

Parameters	Units	56-001	56-002	56-003	56-004	56-005	56-006
Total Organic Halogens (Solid)	mg/Kg	<20.0	<23.0	<23.0	110 *	<24.0	<33.0
Analyst: ELL							
Date/Time: 03/08/94 10:00							
Dilution: 1.0							
Total Pet. Hydrocarbons (Solid)	mg/Kg	<25.0	<29.0	<28.0	90.0 *	<31.0	57.0
Analyst: ELL/JCB							
Date/Time: 03/09/94 14:00							
Dilution: 1.0							

* - % Recovery

NR - Not Required

NA - Not Applicable

080737

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-066
 Sample Name : H94-03.56-002
 Project No. : S19A
 Percent Moisture : 15 %
 Client ID : S19A0004 01

Work Order : H94-03.56
 Date Collected : 04-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 16:26 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.39	0.39	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.5	5.5	U
72-54-8	4,4'-DDD	2.0	2.0	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.7	4.7	U
60-57-1	DIELDRIN	0.78	0.78	U
959-98-8	ENDOSULFAN I	7.8	7.8	U
33213-65-9	ENDOSULFAN II	7.8	7.8	U
1031-07-8	ENDOSULFAN SULFATE	3.9	3.9	U
72-20-8	ENDRIN	2.4	2.4	U
7421-93-4	ENDRIN ALDEHYDE	3.9	3.9	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	2.0	2.0	U
72-43-5	METHOXYCHLOR	20	20	U
8001-35-2	TOXAPHENE	94	94	U
12674-11-2	AROCLOR-1016	20	20	U
11104-28-2	AROCLOR-1221	20	20	U
11141-16-5	AROCLOR-1232	20	20	U
63469-21-9	AROCLOR-1242	20	20	U
12672-29-6	AROCLOR-1248	20	20	U
11097-69-1	AROCLOR-1254	20	20	U
11096-82-5	AROCLOR-1260	20	20	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80738

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-065
 Sample Name : H94-03.56-005
 Project No. : S19A
 Percent Moisture : 20 %
 Client ID : S19A0004 02

Work Order : H94-03.56
 Date Collected : 04-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJA

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 15:40 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.7	1.7	U
319-84-6	ALPHA-BHC	0.42	0.42	U
319-85-7	BETA-BHC	1.3	1.3	U
319-86-8	DELTA-BHC	1.3	1.3	U
58-89-9	GAMMA-BHC/LINDANE	1.3	1.3	U
57-74-9	CHLORDANE	5.9	5.9	U
72-54-8	4,4'-DDD	2.1	2.1	U
72-55-9	4,4'-DDE	1.3	1.3	U
50-29-3	4,4'-DDT	5.0	5.0	U
60-57-1	DIELDRIN	0.84	0.84	U
959-98-8	ENDOSULFAN I	8.4	8.4	U
33213-65-9	ENDOSULFAN II	8.4	8.4	U
1091-07-8	ENDOSULFAN SULFATE	4.2	4.2	U
72-20-8	ENDRIN	2.5	2.5	U
7421-93-4	ENDRIN ALDEHYDE	4.2	4.2	U
76-44-8	HEPTACHLOR	1.3	1.3	U
1024-57-3	HEPTACHLOR EPOXIDE	2.1	2.1	U
72-43-5	METHOXYCHLOR	21	21	U
8001-35-2	TOXAPHENE	100	100	U
12674-11-2	AROCLOR-1016	21	21	U
11104-28-2	AROCLOR-1221	21	21	U
11141-16-5	AROCLOR-1232	21	21	U
53469-21-9	AROCLOR-1242	21	21	U
12672-29-6	AROCLOR-1248	21	21	U
11097-69-1	AROCLOR-1254	21	21	U
11096-82-5	AROCLOR-1260	21	21	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080739

INST ID: 4020

CHESTER DC # ---- 8
SAMPLE NUMBER: 819A000401

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
NORTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305602A

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03056V02A

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C015	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C055	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C145	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYLVINYLETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

080740

INST ID: 4020

CHESTER DC # ---- B
SAMPLE NUMBER: 619A000402

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
SOUTH AREA
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 9403056058

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/11/94

DATAFILE: RU03056V058

DILUTION FACTOR: 1.20

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
----------	---	-----------------

C010	CHLOROMETHANE	12 U
C015	BROMOMETHANE	12 U
C020	VINYL CHLORIDE	12 U
C028	CHLOROETHANE	12 U
C030	METHYLENE CHLORIDE	6 U
C035	ACETONE	12 U
C040	CARBON DISULFIDE	6 U
C045	1,1-DICHLOROETHENE	6 U
C050	1,1-DICHLOROETHANE	6 U
C053	1,2-DICHLOROETHENE (TOTAL)	6 U
C060	CHLOROFORM	6 U
C065	1,2-DICHLOROETHANE	6 U
C110	2-BUTANONE	12 U
C115	1,1,1-TRICHLOROETHANE	6 U
C120	CARBON TETRACHLORIDE	6 U
C125	VINYL ACETATE	12 U
C130	BROMODICHLOROMETHANE	6 U
C140	1,2-DICHLOROPROPANE	6 U
C143	CIS-1,2-DICHLOROPROPENE	6 U
C150	TRICHLOROETHENE	6 U
C155	DIBROMOCHLOROMETHANE	6 U
C160	1,1,2-TRICHLOROETHANE	6 U
C165	BENZENE	6 U
C172	TRANS-1,3-DICHLOROPROPENE	6 U
C175	2-CHLOROETHYL VINYLETHER	12 U
C180	BROMOFORM	6 U
C205	4-METHYL-2-PENTANONE	12 U
C210	2-HEXANONE	12 U
C220	TETRACHLOROETHENE	6 U
C225	1,1,2,2-TETRACHLOROETHANE	6 U
C230	TOLUENE	6 U
C235	CHLOROBENZENE	6 U
C240	ETHYLBENZENE	6 U
C245	STYRENE	6 U
C250	XYLENES (TOTAL)	6 U

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

INST ID: 4020

CHESTER DC # ---- 6
SAMPLE NUMBER: 819A000403

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
PEGGY LAKE
SOILS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940305606

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RUD3056V06

DILUTION FACTOR: 1.60

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010 CHLOROMETHANE	16 U	
C015 BROMOMETHANE	16 U	
C020 VINYL CHLORIDE	16 U	
C025 CHLOROETHANE	16 U	
C030 METHYLENE CHLORIDE	8 U	
C035 ACETONE	16 U	
C040 CARBON DISULFIDE	8 U	
C045 1,1-DICHLOROETHENE	8 U	
C050 1,1-DICHLOROETHANE	8 U	
C055 1,2-DICHLOROETHENE (TOTAL)	8 U	
C060 CHLOROFORM	8 U	
C065 1,2-DICHLOROETHANE	8 U	
C110 2-BUTANONE	16 U	
C115 1,1,1-TRICHLOROETHANE	8 U	
C120 CARBON TETRACHLORIDE	8 U	
C125 VINYL ACETATE	16 U	
C130 BROMODICHLOROMETHANE	8 U	
C140 1,2-DICHLOROPROPANE	8 U	
C145 C16-1,3-DICHLOROPROPENE	8 U	
C150 TRICHLOROETHENE	8 U	
C155 DIBROMOCHLOROMETHANE	8 U	
C160 1,1,2-TRICHLOROETHANE	8 U	
C165 BENZENE	8 U	
C172 TRANS-1,3-DICHLOROPROPENE	8 U	
C175 2-CHLOROETHYL VINYLETHER	16 U	
C180 BROMOFORM	8 U	
C205 4-METHYL-2-PENTANONE	16 U	
C210 2-HEXANONE	16 U	
C220 TETRACHLOROETHENE	8 U	
C225 1,1,2,2-TETRACHLOROETHANE	8 U	
C230 TOLUENE	8 U	
C235 CHLOROBENZENE	8 U	
C240 ETHYLBENZENE	8 U	
C245 STYRENE	8 U	
C250 XYLENES (TOTAL)	8 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

INST ID: 4020

CHESTER DC # ---- 8

SAMPLE NUMBER: 819A000501

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
MAIN POND
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940306002

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:.....

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RU03060V02

DILUTION FACTOR: 1.60

COMPOUND	DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010 CHLOROMETHANE	16 U	
C015 BROMOMETHANE	16 U	
C020 VINYL CHLORIDE	16 U	
C025 CHLOROETHANE	16 U	
C030 METHYLENE CHLORIDE	8 U	
C035 ACETONE	16	18
C040 CARBON DISULFIDE	8 U	
C045 1,1-DICHLOROETHENE	8 U	
C050 1,1-DICHLOROETHANE	8 U	
C053 1,2-DICHLOROETHENE (TOTAL)	8 U	
C060 CHLOROFORM	8 U	
C065 1,2-DICHLOROETHANE	8 U	
C110 2-BUTANONE	16 U	
C115 1,1,1-TRICHLOROETHANE	8 U	
C120 CARBON TETRACHLORIDE	8 U	
C125 VINYL ACETATE	16 U	
C130 BROMODICHLOROMETHANE	8 U	
C140 1,2-DICHLOROPROPANE	8 U	
C143 CIG-1,3-DICHLOROPROPENE	8 U	
C150 TRICHLOROETHENE	8 U	
C155 DIBROMOCHLOROMETHANE	8 U	
C160 1,1,2-TRICHLOROETHANE	8 U	
C165 BENZENE	8 U	
C172 TRANS-1,3-DICHLOROPROPENE	8 U	
C175 2-CHLOROETHYL VINYLETHER	16 U	
C180 BROMOFORM	8 U	
C205 4-METHYL-2-PENTANONE	16 U	
C210 2-HEXANONE	16 U	
C220 TETRACHLOROETHENE	8 U	
C225 1,1,2,2-TETRACHLOROETHANE	8 U	
C230 TOLUENE	8 U	
C235 CHLOROBENZENE	8 U	
C240 ETHYLBENZENE	8 U	
C245 STYRENE	8 U	
C250 XYLENES (TOTAL)	8 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

INST ID: 4020

CHESTER DC # ---- 0
SAMPLE NUMBER: S19A000502

ORGANIC ANALYSIS DATA SHEET

SAN JACINTO
OFFSHORE
SEDIMENTS

LABORATORY NAME: CHESTER LABNET

LAB SAMPLE ID NO.: 940306005

SAMPLE MATRIX: SOIL

DATA RELEASE AUTHORIZED BY:..... DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATE ANALYZED: 03/10/94

DATAFILE: RU03060V05

DILUTION FACTOR: 1.20

COMPOUND		DETECTION LIMIT (MICROGRAMS / KG)	AMOUNT FOUND
C010	CHLOROMETHANE	12 U	
C015	BROMOMETHANE	12 U	
C020	VINYL CHLORIDE	12 U	
C025	CHLOROETHANE	12 U	
C030	METHYLENE CHLORIDE	6 U	
C035	ACETONE	12 U	
C040	CARBON DISULFIDE	6 U	
C045	1,1-DICHLOROETHENE	6 U	
C050	1,1-DICHLOROETHANE	6 U	
C055	1,2-DICHLOROETHENE (TOTAL)	6 U	
C060	CHLOROFORM	6 U	
C065	1,2-DICHLOROETHANE	6 U	
C110	2-BUTANONE	12 U	
C115	1,1,1-TRICHLOROETHANE	6 U	
C120	CARBON TETRACHLORIDE	6 U	
C125	VINYL ACETATE	12 U	
C130	BROMODICHLOROMETHANE	6 U	
C140	1,2-DICHLOROPROPANE	6 U	
C145	CIS-1,3-DICHLOROPROPENE	6 U	
C150	TRICHLOROETHENE	6 U	
C155	DIBROMOCHLOROMETHANE	6 U	
C160	1,1,2-TRICHLOROETHANE	6 U	
C165	BENZENE	6 U	
C172	TRANS-1,3-DICHLOROPROPENE	6 U	
C175	2-CHLOROETHYL VINYLETHER	12 U	
C180	BROMOFORM	6 U	
C205	4-METHYL-2-PENTANONE	12 U	
C210	2-HEXANONE	12 U	
C220	TETRACHLOROETHENE	6 U	
C225	1,1,2,2-TETRACHLOROETHANE	6 U	
C230	TOLUENE	6 U	
C235	CHLOROBENZENE	6 U	
C240	ETHYLBENZENE	6 U	
C245	STYRENE	6 U	
C250	XYLENES (TOTAL)	6 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

080744

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-070
 Sample Name : H94-03.56-006
 Project No. : S19A
 Percent Moisture : 39 %
 Client ID : S19A0004 03

Work Order : H94-03.56
 Date Collected : 04-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MTM

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 19:32 Dilution Factor : 1.000
 Analyzed by : 8388657

Gas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	2.2	2.2	U
319-84-6	ALPHA-BHC	0.55	0.55	U
319-85-7	BETA-BHC	1.6	1.6	U
319-86-8	DELTA-BHC	1.6	1.6	U
58-89-9	GAMMA-BHC/LINDANE	1.6	1.6	U
57-74-9	CHLORDANE	7.7	7.7	U
72-54-8	4,4'-DDD	2.7	2.7	U
72-55-9	4,4'-DDE	1.6	1.6	U
50-29-3	4,4'-DDT	6.6	6.6	U
60-57-1	DIELDRIN	1.1	1.1	U
959-98-8	ENDOSULFAN I	11	11	U
33213-65-9	ENDOSULFAN II	11	11	U
1031-07-8	ENDOSULFAN SULFATE	5.5	5.5	U
72-20-8	ENDRIN	3.3	3.3	U
7421-93-4	ENDRIN ALDEHYDE	5.5	5.5	U
76-44-8	HEPTACHLOR	1.6	1.6	U
1024-57-3	HEPTACHLOR EPOXIDE	2.7	2.7	U
72-43-5	METHOXYCHLOR	27	27	U
8001-35-2	TOXAPHENE	130	130	U
12674-11-2	AROCLOR-1016	27	27	U
11104-28-2	AROCLOR-1221	27	27	U
11141-16-5	AROCLOR-1232	27	27	U
53469-21-9	AROCLOR-1242	27	27	U
12672-29-6	AROCLOR-1248	27	27	U
11097-69-1	AROCLOR 1254	27	27	U
11096-82-5	AROCLOR-1260	27	27	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080745

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000403

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940356006

Level (low/med): LOW

Date Received: 03/07/94

Solids: 60.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13000.00			P
7440-36-0	Antimony	9.30	U		P
7440-38-2	Arsenic	9.70		+	F
7440-39-3	Barium	194.00			P
7440-41-7	Beryllium	1.10	B		P
7440-43-9	Cadmium	1.70	U		P
7440-70-2	Calcium	8130.00		E	P
7440-47-3	Chromium	25.70			P
7440-48-4	Cobalt	9.20	B		P
7440-50-8	Copper	17.60			P
7439-89-6	Iron	16800.00			P
7439-92-1	Lead	45.60		N	F
7439-95-4	Magnesium	5520.00		E	P
7439-96-5	Manganese	1280.00			P
7439-97-6	Mercury	0.33			CV
7440-02-0	Nickel	18.00			P
7440-09-7	Potassium	2670.00			P
7782-49-2	Selenium	0.33	U		F
7440-22-4	Silver	0.99	U		P
7440-23-5	Sodium	6090.00			P
7440-28-0	Thallium	0.99	U		F
7440-62-2	Vanadium	25.10			P
7440-66-6	Zinc	87.80			P
	Cyanide				NR

Color Before: GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

080746

11-MR-1994

Page 1

Summary of Analytical Results

Date received: 8-MR-1994 Customer: FINE, INC. Job name: H94-03.60

Samples

Customer Label ID	Sampling Point	Date Sampled	Customer ID
60-001	QA CC	7-MR-1994	LAB HWRK
60-002	X	7-MR-1994	SI9000501
60-003	QA CC	7-MR-1994	SI9000501
60-004	QA CC	7-MR-1994	SI9000501
60-005	X	7-MR-1994	SI9000502

Parameters

Total Organic Halogens (Solid)		Total Pct. Hydrocarbons (Solid)	
mg/kg	<20.0	mg/kg	<25.0
Dilution: 1.0		Dilution: 1.0	
Date/Time: 03/08/94 14:00		Date/Time: 03/09/94 15:30	
Reagent: RLS		Reagent: EII/IOS	
103 *	<22.0	103 *	<21.0
NR - Not Required		NR - Not Required	
NR - Not Applicable		NR - Not Applicable	

080747

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-077
 Sample Name : H94-03.60-002
 Project No. : S19A
 Percent Moisture : 39 %
 Client ID : S19A0005 01

Work Order : H94-03.60
 Date Collected : 07-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : *MSM*

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 10-MAR-1994 00:58 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	2.2	2.2	U
319-84-6	ALPHA-BHC	0.55	0.55	U
319-85-7	BETA-BHC	1.6	1.6	U
319-86-8	DELTA-BHC	1.6	1.6	U
58-89-9	GAMMA-BHC/LINDANE	1.6	1.6	U
57-74-9	CHLORDANE	7.6	7.6	U
72-54-8	4,4'-DDD	2.7	2.7	U
72-55-9	4,4'-DDE	1.6	1.6	U
50-29-3	4,4'-DDT	6.6	6.6	U
60-57-1	DIELDRIN	1.1	1.1	U
959-98-8	ENDOSULFAN I	11	11	U
33213-65-9	ENDOSULFAN II	11	11	U
1031-07-8	ENDOSULFAN SULFATE	5.5	5.5	U
72-20-8	ENDRIN	3.3	3.3	U
7421-93-4	ENDRIN ALDEHYDE	5.5	5.5	U
76-44-8	HEPTACHLOR	1.6	1.6	U
1024-57-3	HEPTACHLOR EPOXIDE	2.7	2.7	U
72-43-5	METHOXYCHLOR	27	27	U
8001-35-2	TOXAPHENE	130	130	U
12674-11-2	AROCLOR-1016	27	27	U
11104-28-2	AROCLOR-1221	27	27	U
11141-16-5	AROCLOR-1232	27	27	U
53469-21-9	AROCLOR-1242	27	27	U
12672-29-6	AROCLOR-1248	27	27	U
11097-69-1	AROCLOR-1254	27	27	U
11096-82-5	AROCLOR-1260	27	27	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080748

Chester LabNet - HOUSTON

Reported on : 11-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CAP0307-076
 Sample Name : H94-03.60-005
 Project No. : S19A
 Percent Moisture : 14 %
 Client ID : S19A0005 02

Work Order : H94-03.60
 Date Collected : 07-MAR-1994
 Matrix : SOIL
 Date Received : 07-MAR-1994
 Date Extracted : 08-MAR-1994
 Checked by : MJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 10-MAR-1994 00:11 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/kg	
309-00-2	ALDRIN	1.6	1.6	U
319-84-6	ALPHA-BHC	0.39	0.39	U
319-85-7	BETA-BHC	1.2	1.2	U
319-86-8	DELTA-BHC	1.2	1.2	U
58-89-9	GAMMA-BHC/LINDANE	1.2	1.2	U
57-74-9	CHLORDANE	5.4	5.4	U
72-54-8	4,4'-DDD	1.9	1.9	U
72-55-9	4,4'-DDE	1.2	1.2	U
50-29-3	4,4'-DDT	4.7	4.7	U
60-57-1	DIELDRIN	0.78	0.78	U
959-98-8	ENDOSULFAN I	7.8	7.8	U
33213-65-9	ENDOSULFAN II	7.8	7.8	U
1031-07-8	ENDOSULFAN SULFATE	3.9	3.9	U
72-20-8	ENDRIN	2.3	2.3	U
7421-93-4	ENDRIN ALDEHYDE	3.9	3.9	U
76-44-8	HEPTACHLOR	1.2	1.2	U
1024-57-3	HEPTACHLOR EPOXIDE	1.0	1.0	U
72-43-5	METHOXYCHLOR	19	19	U
8001-35-2	TOXAPHENE	93	93	U
12674-11-2	AROCLOR-1016	19	19	U
11104-28-2	AROCLOR-1221	19	19	U
11141-16-5	AROCLOR-1232	19	19	U
53469-21-9	AROCLOR-1242	19	19	U
12672-29-6	AROCLOR-1248	19	19	U
11097-69-1	AROCLOR-1254	19	19	U
11096-82-5	AROCLOR-1260	19	19	U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

80749

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000501

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: S19A

SAS No.:

SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: 940360002

Level (low/med): LOW

Date Received: 03/07/94

Solids: 64.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10800.00			P
7440-36-0	Antimony	8.70	U		P
7440-38-2	Arsenic	9.20		+N	F
7440-39-3	Barium	101.00			P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium	1.60	U		P
7440-70-2	Calcium	7530.00			P
7440-47-3	Chromium	15.20			P
7440-48-4	Cobalt	7.10	B		P
7440-50-8	Copper	10.30			P
7439-89-6	Iron	16600.00			P
7439-92-1	Lead	43.50			F
7439-95-4	Magnesium	3660.00			P
7439-96-5	Manganese	197.00			P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	10.70	B		P
7440-09-7	Potassium	2340.00			P
7782-49-2	Selenium	0.43	B		F
7440-22-4	Silver	0.93	U	N	P
7440-23-5	Sodium	3420.00			P
7440-28-0	Thallium	1.60	U	WN	F
7440-62-2	Vanadium	23.20			P
7440-66-6	Zinc	41.20		E	P
	Cyanide				NR

Color Before: GRAY

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

080750

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

000502

Lab Name: CHESTER LABNET-HOUSTON

Contract:

Lab Code: KEYTX

Case No.: G12A

GAS No.: 1

BQA No.: 1

Matrix (soil/water): SOIL

Lab Sample ID: 940360005

Level (low/mod): LOW

Date Received: 03/07/94

Solids: 62.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	347.00			P
7440-36-0	Antimony	6.80	U		P
7440-38-2	Arsenic	0.97	U	N	P
7440-39-3	Barium	10.60	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium	195.00	B		P
7440-47-3	Chromium	0.97	U		P
7440-48-4	Cobalt	1.20	U		P
7440-50-8	Copper	1.20	U		P
7439-89-6	Iron	428.00			P
7439-92-1	Lead	1.20		W	P
7439-95-4	Magnesium	132.00	B		P
7439-96-5	Manganese	0.00			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	4.60	U		P
7440-09-7	Potassium	271.00	U		P
7782-49-2	Selenium	0.24	U		P
7440-22-4	Silver	0.72	U	N	P
7440-23-5	Sodium	254.00	R		P
7440-28-0	Thallium	0.24	U	WN	P
7440-62-2	Vanadium	0.97	U		P
7440-66-6	Zinc	2.70	B	E	P
	Cyanide				NR

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: COLORLESS

Clarity After:

Artifacts:

Comments:

FORM I - IN

000004

3/90

PP 28 94 HED 14:06

7133286496

P 02

80751

11-MAR-1994

Page 1

Summary of Analytical Results

Date received: 7-MAR-1994

Customer: ELLG, INC.

Job name: R94-03.55

Character: L&W&C ID Sampling Point Date Sampled Customer ID	Samples		
	53-001 CA QC 4-MAR-1994 IAB BLANK NA	55-002 X 4-MAR-1994 S190000301 NA	55-003 X 5-MAR-1994 S190000302 NA
Parameters	Units	BW WATER COMP	SJ WATER COMP
Ammonia Nitrogen as N Analyst: E3V Date/Time: 03/08/94 13:36 Dilution: 1.0	mg/L	<0.10	0.11
Nitrate Analyst: E3V Date/Time: 03/10/94 11:00 Dilution: 1.0	mg/L	<0.05	<0.05
Orthophosphate Phosphorus Analyst: JCB Date/Time: 03/07/94 12:00 Dilution: 1.0	mg/L	<0.01	<0.01
Total Organic Halogens Analyst: E3V Date/Time: 03/09/94 09:00 Dilution: 1.0	mg/L	0.20	0.20
Total Pet. Hydrocarbons Analyst: ELL/JCB Date/Time: 03/08/94 13:00 Dilution: 1.0	mg/L	<0.50	<0.52

* - % Recovery

NR - Not Required

NA - Not Applicable

080752

KEYSTONE DC # ---- 8

INST ID: BIEF

SAMPLE NUMBER: S19C000301

ORGANICS ANALYSIS DATA SHEET

BROWNWOOD
MIDDLE POND
WATER

LABORATORY NAME: CHESTER LABNET ENV.

CASE NO.: ---

LAB SAMPLE ID NO.: 940305502

GC REPORT NO.:

SAMPLE MATRIX: WATER

CONTRACT NO.: --

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

VOLATILES

CONCENTRATION: LOW

DATAFILE: S003055V02

DATE ANALYZED: 03/09/94

DILUTION FACTOR: 1.00

COMPOUND	DETECTION LIMIT (MICROGRAMS / LITER)	AMOUNT FOUND
C010 CHLOROMETHANE	10 U	
C016 BROMOMETHANE	10 U	
C020 VINYL CHLORIDE	10 U	
C025 CHLOROETHANE	10 U	
C030 METHYLENE CHLORIDE	5 U	
C035 ACETONE	10	6 U
C040 CARBON DISULFIDE	5 U	
C045 1,1-DICHLOROETHENE	5 U	
C050 1,1-DICHLOROETHANE	5 U	
C053 1,2-DICHLOROETHENE (TOTAL)	5 U	
C060 CHLOROFORM	5 U	
C065 1,2-DICHLOROETHANE	5 U	
C110 2-BUTANONE	10 U	
C115 1,1,1-TRICHLOROETHANE	5 U	
C120 CARBON TETRACHLORIDE	5 U	
C125 VINYL ACETATE	10 U	
C130 BROMODICHLOROMETHANE	10 U	
C140 1,2-DICHLOROPROPANE	5 U	
C143 C18-1,3-DICHLOROPROPENE	5 U	
C150 TRICHLOROETHENE	5 U	
C155 DIBROMOCHLOROMETHANE	5 U	
C160 1,1,2-TRICHLOROETHANE	5 U	
C165 BENZENE	5 U	
C172 TRANS-1,3-DICHLOROPROPENE	5 U	
C175 2-CHLOROETHYL VINYL ETHER	10 U	
C180 BROMOFORM	5 U	
C205 4-METHYL-2-PENTANONE	10 U	
C210 2-HEXANONE	10 U	
C220 TETRACHLOROETHENE	5 U	
C225 1,1,2,2-TETRACHLOROETHANE	5 U	
C230 TOLUENE	5 U	
C235 CHLOROBENZENE	5 U	
C240 ETHYLBENZENE	5 U	
C245 STYRENE	5 U	
C250 XYLENES (TOTAL)	5 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

080753

INST ID: BIEF

KEYSTONE DC # ---- 8

SAMPLE NUMBER: B19C000302

ORGANICS ANALYSIS DATA SHEET

SAN JACINTO
MAIN POND

LABORATORY NAME: CHESTER LABNET ENV.

CASE NO.: ---

LAB SAMPLE ID NO.: 940305503

GC REPORT NO.:

SAMPLE MATRIX: WATER

CONTRACT NO.: --

DATA RELEASE AUTHORIZED BY:

DATE SAMPLE RECEIVED: 03/07/94

WATER

VOLATILES

CONCENTRATION: LOW

DATAFILE: 5U03055U03Z

DATE ANALYZED: 03/09/94

DILUTION FACTOR: 1.00

COMPOUND

DETECTION
LIMITAMOUNT
FOUND

(MICROGRAMS / LITER)

0010	CHLOROMETHANE	10 U	
0015	BROMOMETHANE	10 U	
0020	VINYL CHLORIDE	10 U	
0025	CHLOROETHANE	10 U	
0030	METHYLENE CHLORIDE	5 U	
0035	ACETONE	10	6 J
0040	CARBON DISULFIDE	5 U	
0045	1,1-DICHLOROETHENE	5 U	
0050	1,1-DICHLOROETHANE	5 U	
0053	1-2-DICHLOROETHENE (TOTAL)	5 U	
0060	CHLOROFORM	5 U	
0063	1,2-DICHLOROETHANE	5 U	
0110	2-BUTANONE	10 U	
0115	1,1,1-TRICHLOROETHANE	5 U	
0120	CARBON TETRACHLORIDE	5 U	
0125	VINYL ACETATE	10 U	
0130	BROMODICHLOROMETHANE	10 U	
0140	1,2-DICHLOROPROPANE	5 U	
0143	CIS-1,3-DICHLOROPROPENE	5 U	
0150	TRICHLOROETHENE	5 U	
0155	DIBROMOCHLOROMETHANE	5 U	
0160	1,1,2-TRICHLOROETHANE	5 U	
0165	BENZENE	5 U	
0172	TRANS-1,3-DICHLOROPROPENE	5 U	
0175	2-CHLOROETHYL VINYL ETHER	10 U	
0180	BROMOFORM	5 U	
0205	4-METHYL-2-PENTANONE	10 U	
0210	2-HEXANONE	10 U	
0220	TETRACHLOROETHENE	5 U	
0225	1,1,2,2-TETRACHLOROETHANE	5 U	
0230	TOLUENE	5 U	
0235	CHLOROBENZENE	5 U	
0240	ETHYLBENZENE	5 U	
0245	STYRENE	5 U	
0250	XYLENES (TOTAL)	5 U	

U = UNDETECTED AT THE LISTED DETECTION LIMIT

J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT

080754

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBP0307-057
 Sample Name : H94-03.55-002
 Project No. : S19C
 Client ID : S19C0003 01

Work Order : H94-03.55
 Date Collected : 04-MAR-1994
 Matrix : WATER
 Date Received : 07-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : NJM

Organic Analysis Data Sheet
 Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 09:27 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/l
309-00-2	ALDRIN	0.040	0.040 U
319-84-6	ALPHA-BHC	0.010	0.010 U
319-85-7	BETA-BHC	0.030	0.030 U
319-86-8	DELTA-BHC	0.030	0.030 U
58-89-9	GAMMA-BHC/LINDANE	0.030	0.030 U
57-74-9	CHLORDANE	0.14	0.14 U
72-54-8	4,4'-DDD	0.050	0.050 U
72-55-9	4,4'-DDE	0.030	0.030 U
50-29-3	4,4'-DDT	0.12	0.12 U
60-57-1	DIELDRIN	0.020	0.020 U
959-98-8	ENDOSULFAN I	0.20	0.20 U
33213-65-9	ENDOSULFAN II	0.20	0.20 U
1031-07-8	ENDOSULFAN SULFATE	0.10	0.10 U
72-20-8	ENDRIN	0.060	0.060 U
7421-93-4	ENDRIN ALDEHYDE	0.10	0.10 U
76-44-8	HEPTACHLOR	0.030	0.030 U
1024-57-3	HEPTACHLOR EPOXIDE	0.050	0.050 U
72-43-5	METHOXYCHLOR	0.50	0.50 U
8001-35-2	TOXAPHENE	2.4	2.4 U
12674-11-2	AROCLOR-1016	0.50	0.50 U
11104-28-2	AROCLOR-1221	0.50	0.50 U
11141-16-5	AROCLOR-1232	0.50	0.50 U
53469-21-9	AROCLOR-1242	0.50	0.50 U
12672-29-6	AROCLOR-1248	0.50	0.50 U
11097-69-1	AROCLOR-1254	0.50	0.50 U
11096-82-5	AROCLOR-1260	0.50	0.50 U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

080755

Chester LabNet - HOUSTON

Reported on : 9-MAR-1994

Client Name : FRENCH LIMITED
 Sample ID : CBP0307-056
 Sample Name : H94-03.55-003
 Project No. : S19C
 Client ID : S19C0003 02

Work Order : H94-03.55
 Date Collected : 05-MAR-1994
 Matrix : WATER
 Date Received : 07-MAR-1994
 Date Extracted : 07-MAR-1994
 Checked by : MJK

Organic Analysis Data Sheet
Compounds Analysis by SW846 Method 8080

Date Analyzed : 9-MAR-1994 08:40 Dilution Factor : 1.000
 Analyzed by : 8388657

Cas #	Compound	Detection Limits	Detected Conc. ug/l
309-00-2	ALDRIN	0.040	0.040 U
319-84-6	ALPHA-BHC	0.010	0.010 U
319-85-7	BETA-BHC	0.030	0.030 U
319-86-8	DELTA-BHC	0.030	0.030 U
58-89-9	GAMMA-BHC/LINDANE	0.030	0.030 U
57-74-9	CHLORDANE	0.14	0.14 U
72-54-8	4,4'-DDD	0.050	0.050 U
72-55-9	4,4'-DDE	0.030	0.030 U
50-29-3	4,4'-DDT	0.12	0.12 U
60-57-1	DIELDRIN	0.020	0.020 U
959-98-8	ENDOSULFAN I	0.20	0.20 U
33213-65-9	ENDOSULFAN II	0.20	0.20 U
1031-07-8	ENDOSULFAN SULFATE	0.10	0.10 U
72-20-8	ENDRIN	0.060	0.060 U
7421-93-4	ENDRIN ALDEHYDE	0.10	0.10 U
76-44-8	HEPTACHLOR	0.030	0.030 U
1024-57-3	HEPTACHLOR EPOXIDE	0.050	0.050 U
72-43-5	METHOXYCHLOR	0.50	0.50 U
8001-35-2	TOXAPHENE	2.4	2.4 U
12674-11-2	AROCLOR-1016	0.50	0.50 U
11104-28-2	AROCLOR-1221	0.50	0.50 U
11141-16-5	AROCLOR-1232	0.50	0.50 U
53469-21-9	AROCLOR-1242	0.50	0.50 U
12672-29-6	AROCLOR-1248	0.50	0.50 U
11097-69-1	AROCLOR-1254	0.50	0.50 U
11096-82-5	AROCLOR-1260	0.50	0.50 U

U = Undetected at the Listed Detection Limit .

J = Compound is present, but below the Detection Limit.

B = Compound is also found in Blank.

11-MAR-1994

Page 1

87755

Summary of Analytical Results

Date received: 7-MAR-1994 Customer: FINE, INC. Job Name: F84-03.54

Samples

Chester Lett ID	54-001	54-002	54-003	54-004	54-005	54-006
Sampling Point	QA QC	X	QA QC	QA QC	X	X
Date Sampled	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994	4-MAR-1994
Customer ID	LAB BUNK	519000101	519000101	519000101	519000102	519000103
	NA	NA	DRP	MS	NA	NA

Parameters

Units

Parameter	mg/L	<0.10	<0.10	<0.10	99.0 *	<0.10	<0.10
Ammonia Nitrogen as N	mg/L	<0.10	<0.10	<0.10	99.0 *	<0.10	<0.10
Analyte: SS7							
Date/Time: 03/08/94 13:36							
Dilution: 1.0							
Nitrate	mg/L	<0.05	<0.05	<0.05	93.0 *	<0.05	<0.05
Analyte: SS7							
Date/Time: 03/10/94 11:00							
Dilution: 1.0							
Orthophosphate Phosphorus	mg/L	<0.01	<0.01	<0.01	100 *	<0.01	<0.01
Analyte: J03							
Date/Time: 03/07/94 12:00							
Dilution: 1.0							

* - % Recovery
 NR - Not Required
 NA - Not Applicable

11-MAR-1994

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Summary of Analytical Results

Data received: 7-MAR-1994 Customer: FINEG, INC. Job num: 894-03.54

Samples

Order Latent ID	54-007	54-008	54-009	54-010	54-011
Sampling Point	X	X	X	X	X
Date Sampled	4-MAR-1994	5-MAR-1994	5-MAR-1994	5-MAR-1994	5-MAR-1994
Customer ID	SLF000104	SLF000105	SLF000106	SLF000107	SLF000108
	NA	NA	NA	NA	NA

Parameters

Units

Parameter	mg/L	mg/L	mg/L	mg/L	mg/L
Ammonia Nitrogen as N	<0.10	<0.10	<0.10	<0.10	0.10
Analyte: EGY					
Date/Time: 03/08/94 13:36					
Dilution: 1.0					
Nitrate	<0.05	<0.05	<0.05	<0.05	<0.05
Analyte: EGY					
Date/Time: 03/10/94 11:00					
Dilution: 1.0					
Orthophosphate Phosphorous	<0.01	<0.01	<0.01	<0.01	<0.01
Analyte: JCB					
Date/Time: 03/07/94 12:00					
Dilution: 1.0					

* - Recovery
 NR - Not Required
 NA - Not Applicable